

=> fil capl; d que l3  
FILE 'CAPLUS' ENTERED AT 11:17:47 ON 21 JAN 2004  
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FILE COVERS 1907 - 21 Jan 2004 VOL 140 ISS 4  
FILE LAST UPDATED: 20 Jan 2004 (20040120/ED)

*Inventor's  
work*

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

L1 76 SEA FILE=CAPLUS ABB=ON COLACO C?/AU  
L2 2 SEA FILE=CAPLUS ABB=ON L1 AND GLYCOSID?/TI  
L3 1 SEA FILE=CAPLUS ABB=ON MEDICAL/TI AND L2

=> d iall l3

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1999:48730 CAPLUS  
DOCUMENT NUMBER: 130:129975  
ENTRY DATE: Entered STN: 25 Jan 1999  
TITLE: Modified **glycosides** and compositions  
comprised thereof for **medical** and other uses  
INVENTOR(S): **Colaco, Camilo**  
PATENT ASSIGNEE(S): Quadrant Holdings Cambridge Limited, UK  
SOURCE: PCT Int. Appl., 39 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
INT. PATENT CLASSIF.:  
MAIN: C07H  
CLASSIFICATION: 63-6 (Pharmaceuticals)  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9901463	A2	19990114	WO 1998-GB1962	19980703
WO 9901463	A3	19990325		
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			

EP 994887	A2	20000426	EP 1998-932361	19980703
EP 994887	B1	20021127		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002510316	T2	20020402	JP 1999-506677	19980703
AT 228528	E	20021215	AT 1998-932361	19980703
ES 2187038	T3	20030516	ES 1998-932361	19980703
US 2002009464	A1	20020124	US 2001-923023	20010806
PRIORITY APPLN. INFO.:			US 1997-51727P	P 19970703
			WO 1998-GB1962	W 19980703
			US 1998-111925	A1 19980708

## ABSTRACT:

Modified glycosides YnX (Y = saccharide subunit; X = C5-6 sugar alc.; n = 1-6; part or all of the OH groups in X and Y are derivatized as esters or ethers) are provided which can be used to form a variety of materials including biodegradable solid delivery systems and optically clear colored devices or coatings. The solid delivery systems can be used for delivery and release of a variety of substances including lipids, proteins, peptides, peptidomimetics, hormones, saccharides, nucleic acids, and nucleoproteins, as well as viruses, bacteria, antigens, and haptens coupled to carriers; they can be in the form of tablets for oral administration, or in the form of powders, microspheres or implants for i.v., intradermal, transdermal, pulmonary, or other route of administration. The modified glycosides may be processed to form a vitreous glass matrix having a substance, such as a therapeutic agent, or an optically active dye incorporated therein. The vitreous glass matrix may be provided in a solid dosage form which is capable of releasing a therapeutic substance in situ at various controlled rates. Alternatively, a melt or soln. contg. modified glycosides and a dye can be used to produce optically clear colored coatings, plastic articles, and synthetic fibers. Thus, nonacetylated derivs. of lactitol, palatinit, .alpha.-D-glucopyranosyl-(1.fwdarw.6)-sorbitol, and .alpha.-D-glucopyranosyl-(1.fwdarw.6)-mannitol with a range of m.p. values and glass transition temps. were produced by reaction of the polyols with Ac2O. Glasses produced by quenching melts of the acetylated polyols were good solvents for poorly water-sol. solutes such as Disperse Red 1; the solutes had little effect on the glass transition temp. and did not cause devitrification. Lactitol nonacetate glasses contg. cyclosporin A and diltiazem-HCl showed different profiles of controlled release on immersion in saline soln.; the release rates were altered by addn. of Tween 20 to the soln.

SUPPL. TERM: glycoside modified glass drug delivery; coating modified glycoside glass dye

INDEX TERM: Immunostimulants  
(adjuvants; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Haptens  
ROLE: BAC (Biological activity or effector, except adverse);  
BSU (Biological study, unclassified); THU (Therapeutic use);  
BIOL (Biological study); USES (Uses)  
(conjugates with carriers; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Drug delivery systems  
(controlled-release, solid; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Drug delivery systems  
(disks; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Glycosides  
Oligosaccharides, biological studies  
ROLE: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(esters and ethers; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Drug delivery systems  
(films; modified glycosides and compns. comprised thereof  
for medical and other uses)

INDEX TERM: Drug delivery systems  
(implants; modified glycosides and compns. comprised  
thereof for medical and other uses)

INDEX TERM: Drug delivery systems  
(lozenges; modified glycosides and compns. comprised  
thereof for medical and other uses)

INDEX TERM: Glass fibers, biological studies  
ROLE: DEV (Device component use); SPN (Synthetic  
preparation); THU (Therapeutic use); BIOL (Biological  
study); PREP (Preparation); USES (Uses)  
(microfibers; modified glycosides and compns. comprised  
thereof for medical and other uses)

INDEX TERM: Drug delivery systems  
(microparticles; modified glycosides and compns.  
comprised thereof for medical and other uses)

INDEX TERM: Drug delivery systems  
(microspheres; modified glycosides and compns. comprised  
thereof for medical and other uses)

INDEX TERM: Animal virus  
Bacteria (Eubacteria)  
Drug delivery systems  
Dyes  
Genetic vectors  
Glass transition temperature  
Needles (tools)  
Optical filters  
Peptidomimetics  
Transparent materials  
Vitreous materials  
(modified glycosides and compns. comprised thereof for  
medical and other uses)

INDEX TERM: Antigens  
Carbohydrates, biological studies  
Cytokines  
Enzymes, biological studies  
Growth factors, animal  
Hormones, animal, biological studies  
Interferons  
Interleukins  
Lipids, biological studies  
Nucleic acids  
Nucleoproteins  
Peptides, biological studies  
Proteins, general, biological studies  
ROLE: BAC (Biological activity or effector, except adverse);  
BSU (Biological study, unclassified); THU (Therapeutic use);  
BIOL (Biological study); USES (Uses)  
(modified glycosides and compns. comprised thereof for  
medical and other uses)

INDEX TERM: Isomaltooligosaccharides  
Maltooligosaccharides  
ROLE: DEV (Device component use); SPN (Synthetic  
preparation); THU (Therapeutic use); BIOL (Biological  
study); PREP (Preparation); USES (Uses)  
(modified polyol glycosides contg.; modified glycosides  
and compns. comprised thereof for medical and other uses)

INDEX TERM: Antibodies  
ROLE: BAC (Biological activity or effector, except adverse);  
BSU (Biological study, unclassified); THU (Therapeutic use);  
BIOL (Biological study); USES (Uses)

(monoclonal; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Acetylation  
(of glycosides; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Quenching (cooling)  
(of modified glycoside melts; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Solutions  
(of modified glycosides, glass formation from; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Drug delivery systems  
(particles; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Alcohols, biological studies  
ROLE: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(polyhydric, glycosides, esters and ethers; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Drug delivery systems  
(powders; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Drug delivery systems  
(spheres; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Drug delivery systems  
(suppositories; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Drug delivery systems  
(tablets; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Metals, uses  
Plastics, uses  
ROLE: DEV (Device component use); USES (Uses)  
(transparent coatings on; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Coating materials  
(transparent; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: 33286-22-5, Diltiazem hydrochloride 59865-13-3, Cyclosporin A  
ROLE: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: 9002-72-6, Growth hormone 9004-10-8, Insulin, biological studies  
ROLE: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: 37091-07-9P, Lactitol nonaacetate 41897-24-9P, Maltitol nonaacetate 41897-25-0P 219827-68-6P 219827-69-7P  
ROLE: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(modified glycosides and compns. comprised thereof for medical and other uses)



INDEX TERM: 50-70-4P, D-Glucitol, biological studies 69-65-8P,  
D-Mannitol 87-99-0P, Xylitol 149-32-6P, Erythritol  
488-81-3P, Ribitol 608-66-2P, Galactitol  
ROLE: DEV (Device component use); SPN (Synthetic  
preparation); THU (Therapeutic use); BIOL (Biological  
study); PREP (Preparation); USES (Uses)  
(modified glycosides contg.; modified glycosides and  
comps. comprised thereof for medical and other uses)

INDEX TERM: 50-69-1P, D-Ribose 50-99-7P, D-Glucose, biological studies  
57-48-7P, D-Fructose, biological studies 58-86-6P,  
D-Xylose, biological studies 59-23-4P, D-Galactose,  
biological studies 65-42-9P, Lyxose 147-81-9P, Arabinose  
3458-28-4P, D-Mannose 5556-48-9P, Ribulose 5987-68-8P,  
Altrose 6038-51-3P, Allose 19163-87-2P, Gulose  
ROLE: DEV (Device component use); SPN (Synthetic  
preparation); THU (Therapeutic use); BIOL (Biological  
study); PREP (Preparation); USES (Uses)  
(modified polyol glycosides contg.; modified glycosides  
and comps. comprised thereof for medical and other uses)

INDEX TERM: 2872-52-8, Disperse Red 1  
ROLE: PRP (Properties)  
(soly. in modified glycoside glass; modified glycosides  
and comps. comprised thereof for medical and other uses)

=> fil reg; d scan 14

FILE 'REGISTRY' ENTERED AT 11:18:35 ON 21 JAN 2004  
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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 20 JAN 2004 HIGHEST RN 639777-15-4  
DICTIONARY FILE UPDATES: 20 JAN 2004 HIGHEST RN 639777-15-4

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

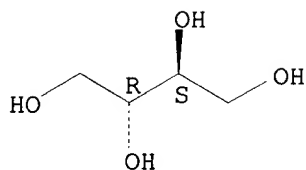
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN 1,2,3,4-Butanetetrol, (2R,3S)-rel- (9CI)  
MF C4 H10 O4  
CI COM

Relative stereochemistry.

*structures  
from  
inventor's  
work*



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

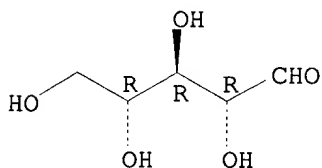
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):28

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN Insulin (9CI)  
MF Unspecified  
CI PMS, COM, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN D-Ribose (9CI)  
MF C5 H10 O5  
CI COM

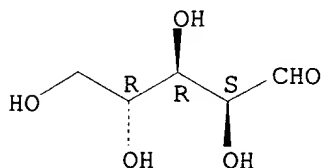
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN Arabinose (8CI, 9CI)  
MF C5 H10 O5  
CI COM

Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN Somatotropin (9CI)  
MF Unspecified

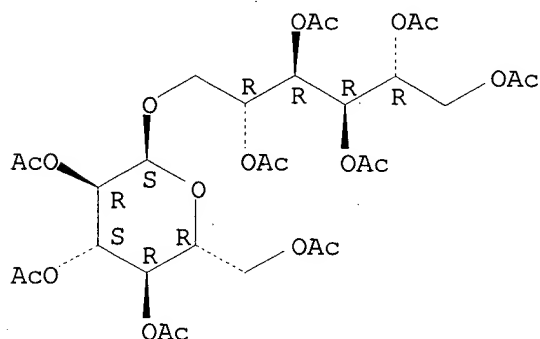
CI PMS, COM, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN D-Glucitol, 6-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-,  
pentaacetate, mixt. with 1-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-  
glucopyranosyl)[D-mannitol] pentaacetate (9CI)  
MF C30 H42 O20 . C30 H42 O20  
CI MXS

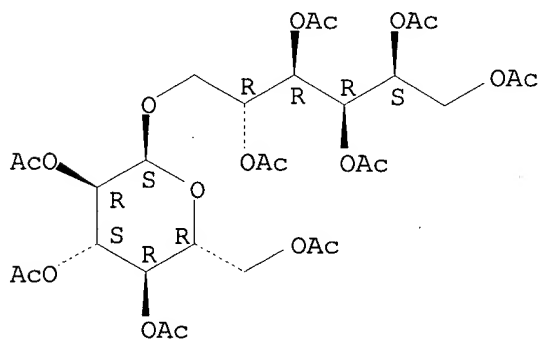
CM 1

Absolute stereochemistry.

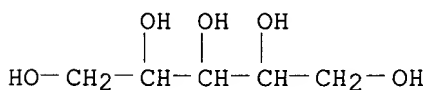


CM 2

Absolute stereochemistry.



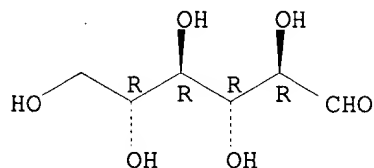
L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN Xylitol (6CI, 8CI, 9CI)  
MF C5 H12 O5  
CI COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN Allose (6CI, 8CI, 9CI)  
MF C6 H12 O6  
CI COM

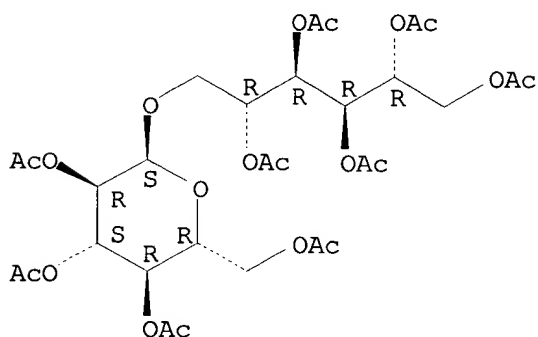
Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN D-Mannitol, 1-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-,  
pentaacetate (9CI)  
MF C30 H42 O20  
CI COM

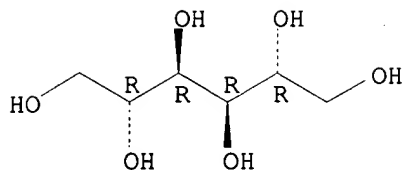
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN D-Mannitol (9CI)  
MF C6 H14 O6  
CI COM

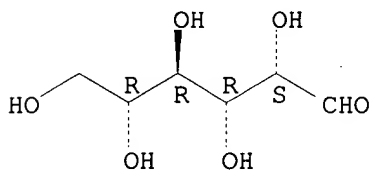
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN Altrose (6CI, 7CI, 8CI, 9CI)  
MF C6 H12 O6  
CI COM

Relative stereochemistry.



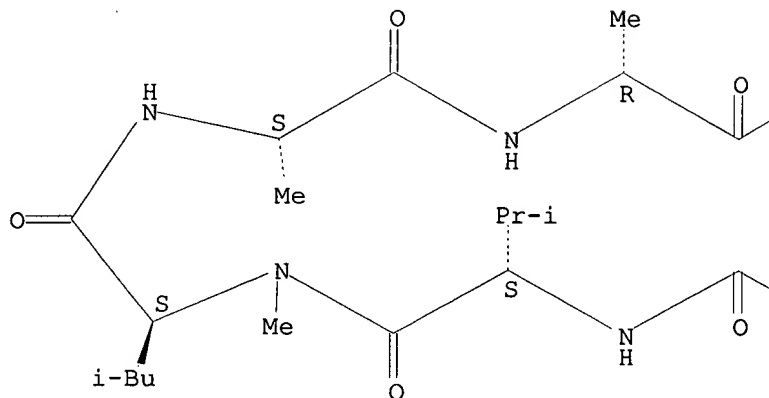
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN Cyclosporin A (9CI)  
SQL 11  
MF C62 H111 N11 O12  
CI COM

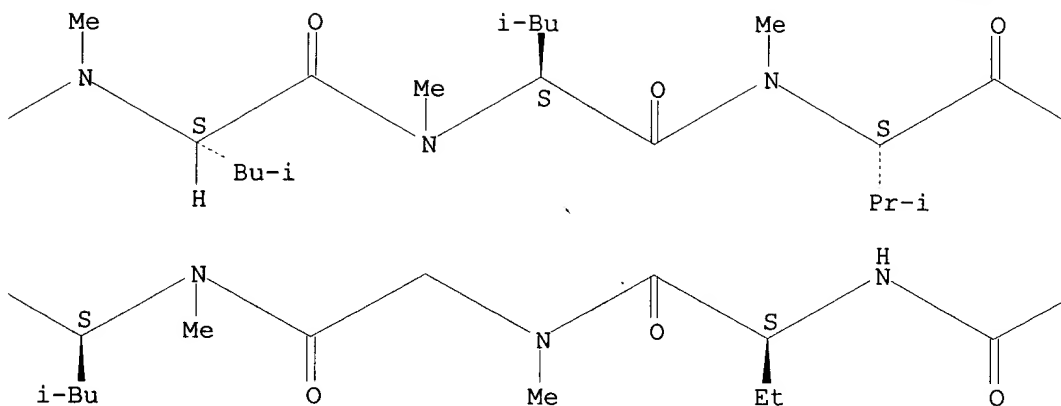
\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

Absolute stereochemistry.  
Double bond geometry as shown.

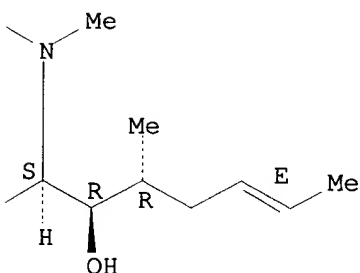
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PAGE 1-B



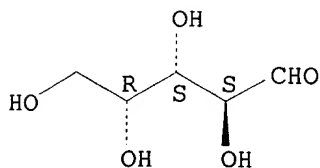
PAGE 1-C



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
 IN Lyxose (6CI, 8CI, 9CI)  
 MF C5 H10 O5  
 CI COM

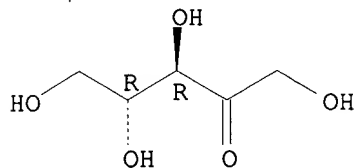
Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN erythro-2-Pentulose (9CI)  
MF C5 H10 O5  
CI COM

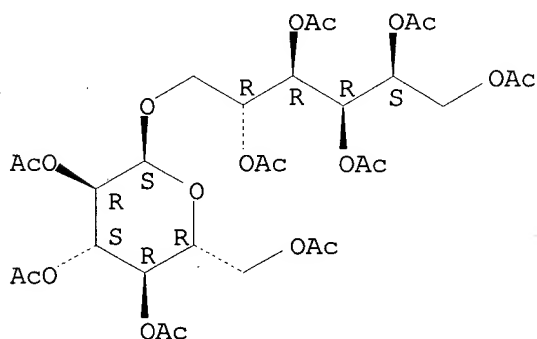
Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN D-Glucitol, 6-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate (9CI)  
MF C30 H42 O20  
CI COM

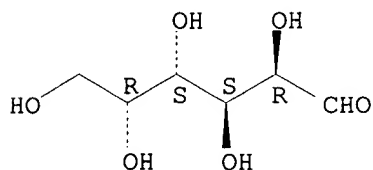
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN D-Galactose (9CI)  
MF C6 H12 O6  
CI COM

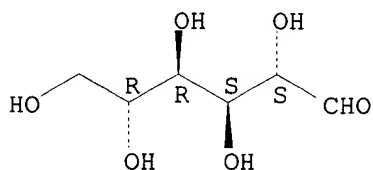
Absolute stereochemistry. Rotation (+).



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN D-Mannose (9CI)  
MF C6 H12 O6  
CI COM

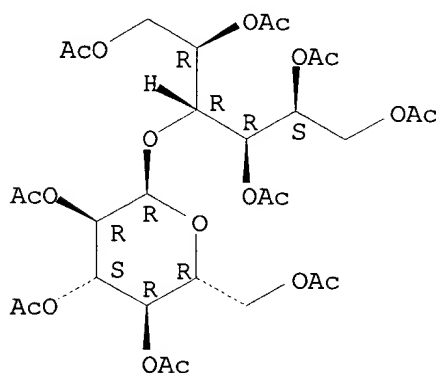
Absolute stereochemistry. Rotation (+).



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN D-Glucitol, 4-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-,  
pentaacetate (9CI)  
MF C30 H42 O20

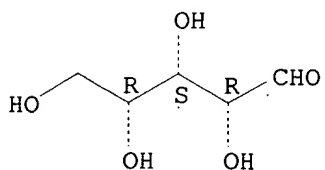
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN D-Xylose (9CI)  
MF C5 H10 O5  
CI COM

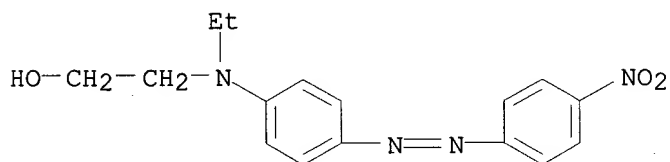
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*



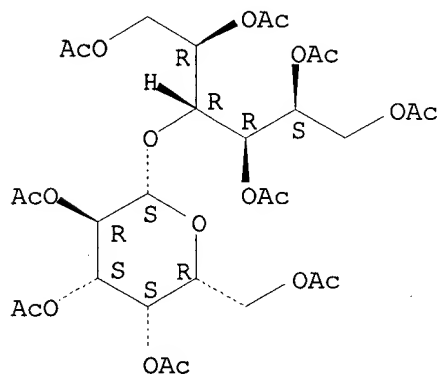
L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN Ethanol, 2-[ethyl[4-[(4-nitrophenyl)azo]phenyl]amino]- (9CI)  
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT  
MF C16 H18 N4 O3  
CI COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN D-Glucitol, 4-O-(2,3,4,6-tetra-O-acetyl-.beta.-D-galactopyranosyl)-, pentaacetate (9CI)  
MF C30 H42 O20

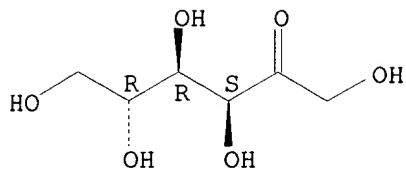
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN D-Fructose (9CI)  
MF C6 H12 O6  
CI COM

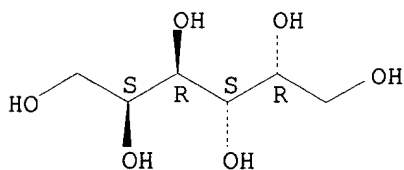
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
 IN Galactitol (6CI, 8CI, 9CI)  
 MF C6 H14 O6  
 CI COM

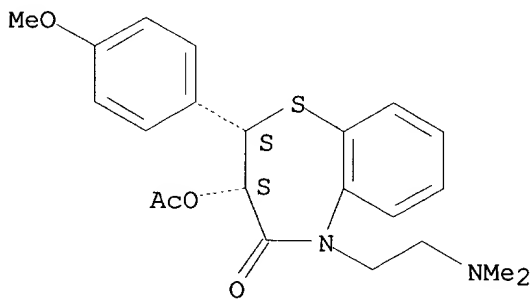
Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
 IN 1,5-Benzothiazepin-4(5H)-one, 3-(acetyloxy)-5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, monohydrochloride, (2S,3S)- (9CI)  
 MF C22 H26 N2 O4 S . Cl H  
 CI COM

Absolute stereochemistry. Rotation (+).



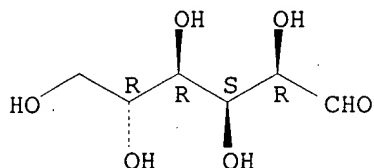
● HCl

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
 IN D-Glucose (8CI, 9CI)

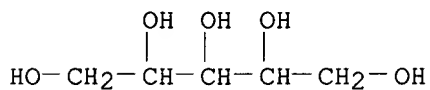
MF C6 H12 O6  
CI COM

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

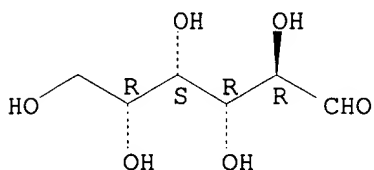
L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN Ribitol (6CI, 8CI, 9CI)  
MF C5 H12 O5  
CI COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN Gulose (6CI, 7CI, 8CI, 9CI)  
MF C6 H12 O6  
CI COM

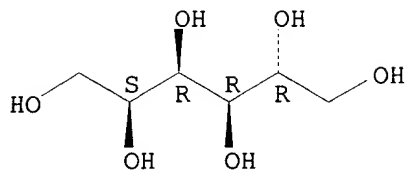
Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN  
IN D-Glucitol (9CI)  
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT  
MF C6 H14 O6  
CI COM

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

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*text  
search*

FILE COVERS 1907 - 21 Jan 2004 VOL 140 ISS 4  
FILE LAST UPDATED: 20 Jan 2004 (20040120/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L7 189461 SEA FILE=CAPLUS ABB=ON L5  
L8 246088 SEA FILE=CAPLUS ABB=ON (GLUCOSE/OBI OR GALACTOSE/OBI OR FRUCTOSE/OBI OR RIBULOSE/OBI OR MANNOSE/OBI OR RIBOSE/OBI OR ARABINOSE/OBI OR XYLOSE/OBI OR LYXOSE/OBI OR ALLOSE/OBI OR ALTROSE/OBI OR GULOSE/OBI)  
L9 30936 SEA FILE=CAPLUS ABB=ON L6  
L10 22636 SEA FILE=CAPLUS ABB=ON (ERYTHRITOL/OBI OR RIBITOL/OBI OR XYLITOL/OBI OR GALACTITOL/OBI OR GLUCITOL/OBI OR MANNITOL/OBI)  
L11 384955 SEA FILE=CAPLUS ABB=ON GLASS/OBI  
L13 48663 SEA FILE=CAPLUS ABB=ON GLYCOSIDE#/OBI  
L14 28 SEA FILE=CAPLUS ABB=ON L11(L)L13  
L15 1 SEA FILE=CAPLUS ABB=ON (L7 OR L8) AND (L9 OR L10) AND L14

L11 384955 SEA FILE=CAPLUS ABB=ON GLASS/OBI  
L12 26165 SEA FILE=CAPLUS ABB=ON VITREOUS/OBI  
L13 48663 SEA FILE=CAPLUS ABB=ON GLYCOSIDE#/OBI  
L14 28 SEA FILE=CAPLUS ABB=ON L11(L)L13  
L16 1 SEA FILE=CAPLUS ABB=ON L14 AND L12

L5 19 SEA FILE=REGISTRY ABB=ON (GLUCOSE OR GALACTOSE OR FRUCTOSE OR RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE OR ALLOSE OR ALTROSE OR GULOSE)/CN  
L6 8 SEA FILE=REGISTRY ABB=ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR GALACTITOL OR GLUCITOL OR MANNITOL)/CN  
L7 189461 SEA FILE=CAPLUS ABB=ON L5  
L8 246088 SEA FILE=CAPLUS ABB=ON (GLUCOSE/OBI OR GALACTOSE/OBI OR FRUCTOSE/OBI OR RIBULOSE/OBI OR MANNOSE/OBI OR RIBOSE/OBI OR

ARABINOSE/OBI OR XYLOSE/OBI OR LYXOSE/OBI OR ALLOSE/OBI OR  
ALTROSE/OBI OR GULOSE/OBI)  
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L11 384955 SEA FILE=CAPLUS ABB=ON GLASS/OBI  
L12 26165 SEA FILE=CAPLUS ABB=ON VITREOUS/OBI  
L17 2 SEA FILE=CAPLUS ABB=ON (L7 OR L8) AND (L9 OR L10) AND L11 AND  
L12

L5 19 SEA FILE=REGISTRY ABB=ON (GLUCOSE OR GALACTOSE OR FRUCTOSE OR  
RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE  
OR ALLOSE OR ALTROSE OR GULOSE)/CN  
L6 8 SEA FILE=REGISTRY ABB=ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR  
GALACTITOL OR GLUCITOL OR MANNITOL)/CN  
L7 189461 SEA FILE=CAPLUS ABB=ON L5  
L8 246088 SEA FILE=CAPLUS ABB=ON (GLUCOSE/OBI OR GALACTOSE/OBI OR  
FRUCTOSE/OBI OR RIBULOSE/OBI OR MANNOSE/OBI OR RIBOSE/OBI OR  
ARABINOSE/OBI OR XYLOSE/OBI OR LYXOSE/OBI OR ALLOSE/OBI OR  
ALTROSE/OBI OR GULOSE/OBI)  
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L11 384955 SEA FILE=CAPLUS ABB=ON GLASS/OBI  
L12 26165 SEA FILE=CAPLUS ABB=ON VITREOUS/OBI  
L19 21259 SEA FILE=CAPLUS ABB=ON L11(L) DEV/RL  
L21 25687 SEA FILE=CAPLUS ABB=ON (L7 OR L8) (L) (DEV OR THU OR PAC OR BAC  
OR PKT OR DMA)/RL  
L22 4807 SEA FILE=CAPLUS ABB=ON (L9 OR L10) (L) (DEV OR THU OR PAC OR  
BAC OR PKT OR DMA)/RL  
L24 3 SEA FILE=CAPLUS ABB=ON L21 AND L22 AND (L19 OR (L11 AND L12))

Notes

DEV =

device component  
useTHU = therapeutic  
use

L5 19 SEA FILE=REGISTRY ABB=ON (GLUCOSE OR GALACTOSE OR FRUCTOSE OR  
RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE  
OR ALLOSE OR ALTROSE OR GULOSE)/CN  
L6 8 SEA FILE=REGISTRY ABB=ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR  
GALACTITOL OR GLUCITOL OR MANNITOL)/CN  
L7 189461 SEA FILE=CAPLUS ABB=ON L5  
L8 246088 SEA FILE=CAPLUS ABB=ON (GLUCOSE/OBI OR GALACTOSE/OBI OR  
FRUCTOSE/OBI OR RIBULOSE/OBI OR MANNOSE/OBI OR RIBOSE/OBI OR  
ARABINOSE/OBI OR XYLOSE/OBI OR LYXOSE/OBI OR ALLOSE/OBI OR  
ALTROSE/OBI OR GULOSE/OBI)  
L9 30936 SEA FILE=CAPLUS ABB=ON L6  
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XYLITOL/OBI OR GALACTITOL/OBI OR GLUCITOL/OBI OR MANNITOL/OBI)  
L11 384955 SEA FILE=CAPLUS ABB=ON GLASS/OBI  
L25 32 SEA FILE=CAPLUS ABB=ON (L7 OR L8) (L) L11 AND (L9 OR L10) (L) L11  
L26 28616 SEA FILE=CAPLUS ABB=ON L11(W) TRANSITION#/OBI  
L27 13 SEA FILE=CAPLUS ABB=ON L25 NOT L26  
L28 28 SEA FILE=CAPLUS ABB=ON SUGAR/OBI (W) L11  
L29 1 SEA FILE=CAPLUS ABB=ON L27 AND L28

PAC = pharmacologic  
activityBAC = biological  
activityPKT = pharmacokinetic  
parametersDMA = drug  
mechanism  
of action

L5 19 SEA FILE=REGISTRY ABB=ON (GLUCOSE OR GALACTOSE OR FRUCTOSE OR  
RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE  
OR ALLOSE OR ALTROSE OR GULOSE)/CN

L6 8 SEA FILE=REGISTRY ABB=ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR GALACTITOL OR GLUCITOL OR MANNITOL)/CN  
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L8 246088 SEA FILE=CAPLUS ABB=ON (GLUCOSE/OBI OR GALACTOSE/OBI OR FRUCTOSE/OBI OR RIBULOSE/OBI OR MANNOSE/OBI OR RIBOSE/OBI OR ARABINOSE/OBI OR XYLOSE/OBI OR LYXOSE/OBI OR ALLOSE/OBI OR ALTROSE/OBI OR GULOSE/OBI)  
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L10 22636 SEA FILE=CAPLUS ABB=ON (ERYTHRITOL/OBI OR RIBITOL/OBI OR XYLITOL/OBI OR GALACTITOL/OBI OR GLUCITOL/OBI OR MANNITOL/OBI)  
L11 384955 SEA FILE=CAPLUS ABB=ON GLASS/OBI  
L21 25687 SEA FILE=CAPLUS ABB=ON (L7 OR L8) (L) (DEV OR THU OR PAC OR BAC OR PKT OR DMA)/RL  
L22 4807 SEA FILE=CAPLUS ABB=ON (L9 OR L10) (L) (DEV OR THU OR PAC OR BAC OR PKT OR DMA)/RL  
L23 17 SEA FILE=CAPLUS ABB=ON L21 AND L22 AND L11  
L26 28616 SEA FILE=CAPLUS ABB=ON L11(W)TRANSITION#/OBI  
L30 15 SEA FILE=CAPLUS ABB=ON L23 AND PHARMAC?/SC, SX  
L31 4 SEA FILE=CAPLUS ABB=ON L30 NOT L26

=> s (l15 or l16 or l17 or l24 or l29 or l31) not 13

L76 8 (L15 OR L16 OR L17 OR L24 OR L29 OR L31) NOT (L3) *previously printed*

=> fil wpids; d que 147; d que 150; d que 154; d que 160

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FILE LAST UPDATED: 20 JAN 2004 <20040120/UP>  
MOST RECENT DERWENT UPDATE: 200405 <200405/DW>  
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L39 34922 SEA FILE=WPIDS ABB=ON (GLUCOSE OR GALACTOSE OR FRUCTOSE OR RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE OR ALLOSE OR ALTROSE OR GULOSE)  
L40 7031 SEA FILE=WPIDS ABB=ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR GALACTITOL OR GLUCITOL OR MANNITOL)  
L42 11966 SEA FILE=WPIDS ABB=ON SACCHARIDE# OR MONOSACCHARIDE#  
L43 37098 SEA FILE=WPIDS ABB=ON POLYALCOHOL# OR POLY ALCOHOL# OR

POLYOL#

L44 355867 SEA FILE=WPIDS ABB=ON GLASS  
 L45 6474 SEA FILE=WPIDS ABB=ON VITREOUS  
 L47 4 SEA FILE=WPIDS ABB=ON (L39 OR L42) AND (L40 OR L43) AND L44  
 AND L45

L41 4829 SEA FILE=WPIDS ABB=ON GLYCOSIDE#  
 L44 355867 SEA FILE=WPIDS ABB=ON GLASS  
 L45 6474 SEA FILE=WPIDS ABB=ON VITREOUS  
 L48 241873 SEA FILE=WPIDS ABB=ON MODIF?  
 L49 401338 SEA FILE=WPIDS ABB=ON ALTER?  
 L50 1 SEA FILE=WPIDS ABB=ON ((L48 OR L49)) (5A)L41 AND L44 AND L45

L39 34922 SEA FILE=WPIDS ABB=ON (GLUCOSE OR GALACTOSE OR FRUCTOSE OR  
 RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE  
 OR ALLOSE OR ALTROSE OR GULOSE)  
 L40 7031 SEA FILE=WPIDS ABB=ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR  
 GALACTITOL OR GLUCITOL OR MANNITOL)  
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 L42 11966 SEA FILE=WPIDS ABB=ON SACCHARIDE# OR MONOSACCHARIDE#  
 L43 37098 SEA FILE=WPIDS ABB=ON POLYALCOHOL# OR POLY ALCOHOL# OR  
 POLYOL#  
 L44 355867 SEA FILE=WPIDS ABB=ON GLASS  
 L45 6474 SEA FILE=WPIDS ABB=ON VITREOUS  
 L48 241873 SEA FILE=WPIDS ABB=ON MODIF?  
 L49 401338 SEA FILE=WPIDS ABB=ON ALTER?  
 L51 3209 SEA FILE=WPIDS ABB=ON (((L48 OR L49) (5A)L41) OR ((L39 OR L42)  
 AND (L40 OR L43)))  
 L52 88 SEA FILE=WPIDS ABB=ON L44 AND L51  
 L54 3 SEA FILE=WPIDS ABB=ON B/DC AND L52 AND L45

L39 34922 SEA FILE=WPIDS ABB=ON (GLUCOSE OR GALACTOSE OR FRUCTOSE OR  
 RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE  
 OR ALLOSE OR ALTROSE OR GULOSE)  
 L40 7031 SEA FILE=WPIDS ABB=ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR  
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 L43 37098 SEA FILE=WPIDS ABB=ON POLYALCOHOL# OR POLY ALCOHOL# OR  
 POLYOL#  
 L44 355867 SEA FILE=WPIDS ABB=ON GLASS  
 L48 241873 SEA FILE=WPIDS ABB=ON MODIF?  
 L49 401338 SEA FILE=WPIDS ABB=ON ALTER?  
 L51 3209 SEA FILE=WPIDS ABB=ON (((L48 OR L49) (5A)L41) OR ((L39 OR L42)  
 AND (L40 OR L43)))  
 L52 88 SEA FILE=WPIDS ABB=ON L44 AND L51  
 L53 55 SEA FILE=WPIDS ABB=ON B/DC AND L52  
 L55 4803 SEA FILE=WPIDS ABB=ON BIOACTIV?  
 L56 36826 SEA FILE=WPIDS ABB=ON ANTIBIOTIC? OR ANTIFUNG? OR ANTIMYCOT?  
 L57 17 SEA FILE=WPIDS ABB=ON L53 AND (L55 OR L56)  
 L59 134661 SEA FILE=WPIDS ABB=ON MATRIX OR MATRICES  
 L60 9 SEA FILE=WPIDS ABB=ON L57 AND L59

=> s (l47 or l50 or l54 or l60)

L77 12 (L47 OR L50 OR L54 OR L60)



=> fil DRUGU, PASCAL, JICST-EPLUS, BIOTECHNO, ESBIODASE, BIOTECHDS, BIOSIS, TOXCENTER  
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=> d que 171; d que 173; d que 174  
L61 813351 SEA (GLUCOSE OR GALACTOSE OR FRUCTOSE OR RIBULOSE OR MANNOSE  
OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE OR ALLOSE OR  
ALTROSE OR GULOSE)  
L62 56763 SEA SACCHARIDE# OR MONOSACCHARIDE#  
L63 54258 SEA (ERYTHRITOL OR RIBITOL OR XYLITOL OR GALACTITOL OR  
GLUCITOL OR MANNITOL)  
L64 47095 SEA POLYOL# OR POLYALCOHOL#  
L66 255586 SEA GLASS  
L67 532013 SEA MATRIX OR MATRICES  
L68 32215 SEA VITREOUS  
L71 4 SEA (L61 OR L62) AND (L63 OR L64) AND L66 AND (L67 OR L68)

L65 497 SEA GLYCOSIDE# (5A) (MODIF? OR ALTER?)  
L66 255586 SEA GLASS  
L73 1 SEA L65 AND L66

L61 813351 SEA (GLUCOSE OR GALACTOSE OR FRUCTOSE OR RIBULOSE OR MANNOSE  
OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE OR ALLOSE OR  
ALTROSE OR GULOSE)  
L62 56763 SEA SACCHARIDE# OR MONOSACCHARIDE#  
L63 54258 SEA (ERYTHRITOL OR RIBITOL OR XYLITOL OR GALACTITOL OR  
GLUCITOL OR MANNITOL)  
L64 47095 SEA POLYOL# OR POLYALCOHOL#  
L66 255586 SEA GLASS  
L69 197912 SEA BIOACTIV?  
L70 6763559 SEA PHARMAC? OR DRUG#  
L74 19 SEA (L61 OR L62) (L) (L63 OR L64) (L) L66 (L) (L69 OR L70)

=> s 171 or 173 or 174

L78            23 L71 OR L73 OR L74

=> dup rem 176,178,177

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PROCESSING COMPLETED FOR L77

L79            37 DUP REM L76 L78 L77 (6 DUPLICATES REMOVED)  
              ANSWERS '1-8' FROM FILE CAPLUS  
              ANSWERS '9-14' FROM FILE DRUGU  
              ANSWERS '15-16' FROM FILE PASCAL  
              ANSWER '17' FROM FILE JICST-EPLUS  
              ANSWERS '18-19' FROM FILE BIOTECHNO  
              ANSWERS '20-22' FROM FILE BIOTECHDS  
              ANSWERS '23-25' FROM FILE BIOSIS  
              ANSWER '26' FROM FILE TOXCENTER  
              ANSWERS '27-37' FROM FILE WPIDS

=> d ibib ab hitrn 1-8; d iall 9-37; fil hom

L79 ANSWER 1 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1  
ACCESSION NUMBER:        2003:334871 CAPLUS  
DOCUMENT NUMBER:        138:358452  
TITLE:                    Kit for the preparation of a pharmaceutical  
                          composition  
INVENTOR(S):             Lintz, Frank-Christophe; Keller, Manfred  
PATENT ASSIGNEE(S):     Pari G.m.b.H., Germany  
SOURCE:                   PCT Int. Appl., 31 pp.  
                          CODEN: PIXXD2  
DOCUMENT TYPE:            Patent  
LANGUAGE:                English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003035030	A1	20030501	WO 2002-EP11918	20021024

W: AU, CA, JP, MX, NZ, RU, US

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,  
LU, MC, NL, PT, SE, SK, TR

PRIORITY APPLN. INFO.: EP 2001-124384 A 20011024

AB The invention relates to pharmaceutical kits for the prepn. of liq. compns. which can be administered to humans as aerosols for the diagnosis, prevention or treatment of human diseases. A kit according to the invention comprises a solid compn. and a sterile aq. liq. capable of dispersing or dissolving the solid compn. to form a liq. compn. which can be aerosolized. The solid compn. of the kit comprises one or more active compds. and a water-sol., low mol. wt. excipient. Preferably, the solid compn. comprises a sugar or a sugar alc., such as mannitol, lactose, or glucose. For example, an aq. soln. contg. 5.2% mannitol, 8 .mu.g/mL formoterol fumarate, and 0.1% Polysorbate 80 was prepd., sterilized, and lyophilized (2 mL/vial). Upon addn. of 1 mL of sterile water, the lyophylizate was capable of dissolving in a relatively short time due to the presence of surfactant. In order to further reduce dissoln. time of lyophylizate, the amt. of surfactant was increased. The dissoln. times for 0.1%, 0.2%, and 0.5% Polysorbate 80 were 73, 40, and 30 s, resp. The reconstituted soln. could be administered by nebulization.

IT 50-99-7, D-Glucose, biological studies 69-65-8

, D-Mannitol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(kits for prepn. of aerosolized liq. compns. of agents unstable in aq. medium for diagnosis and therapy)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L79 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:991322 CAPLUS

DOCUMENT NUMBER: 140:47515

TITLE: Modified-release, multiple unit drug delivery systems comprising rate controlling polymers

INVENTOR(S): Kumar, Pratik; Jain, Girish Kumar; Rampal, Ashok;  
Nithiyanandam, Ravikumar; Ramakrishnan, Sankar;  
Raghuvanshi, Rajeev Singh

PATENT ASSIGNEE(S): Ranbaxy Laboratories Limited, India

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003103637	A2	20031218	WO 2003-IB2186	20030609

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,  
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,  
MD, RU, TJ, TMRW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,  
NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: IN 2002-DE617 A 20020607

IN 2002-DE1157 A 20021115

IN 2003-DE234 A 20030306

AB The invention relates to novel modified-release multiple unit systems, and methods of prepg. these systems, which can be easily compressed into tablets or filled into capsules or sachets without affecting the desired release characteristics of the pharmaceutical active ingredients incorporated within the systems. Each unit includes at least one core having an outer surface, a first coating layer surrounding at least a portion of the outer surface of the core and having an outer surface, one or more rate controlling polymers, and one or more active pharmaceutical ingredients. The coating layer includes one or both the active pharmaceutical ingredients and the rate controlling polymers. The tablet may further include an outer layer on the outer surface of the unit which includes a material that is one or both of elastic and compressible. The material may be a wax materials, such as polyethylene glycol (PEG). For example, modified-release multiple units (pellets) were prepd. contg. (i) non-pariel seed 65 mg, as an inert core, (ii) venlafaxine-HCl 171.0 mg, magnesium stearate 13.5 mg, colloidal silica 19.7 mg, hydroxypropyl Me cellulose 13.5 mg, and water, as a drug layer, (iii) Et cellulose 93 mg, hydroxypropyl Me cellulose 24 mg, triacetin 1% of total polymer, mg as a rate controlling layer, and (iv) polyethylene glycol (PEG) 6000, as a wax layer. Pellets 473 mg, silicified microcryst. cellulose 288 mg, PEG 6000 71 mg, Crospovidone 102 mg, and magnesium cellulose were compressed into sustained-release tablets.

IT 50-99-7, D-Glucose, biological studies 69-65-8

, D-Mannitol 87-99-0, Xylitol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(cores; modified-release, multiple unit drug delivery systems  
comprising rate controlling polymers)

L79 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:449491 CAPLUS

DOCUMENT NUMBER: 137:37634

TITLE: Absorbing agents and cover layer which is impermeable  
to active substances and which contains  
channel-formers or removable protective layer of a  
transdermal therapeutic system

INVENTOR(S): Beier, Cornelia; Kibele, Ralf

PATENT ASSIGNEE(S): Hexal Ag, Germany

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002045700	A2	20020613	WO 2001-EP14280	20011205
WO 2002045700	A3	20030103		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
DE 10060852	A1	20020620	DE 2000-10060852	20001206
AU 2002029618	A5	20020618	AU 2002-29618	20011205
EP 1339397	A2	20030903	EP 2001-990513	20011205
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,			

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

## PRIORITY APPLN. INFO.:

DE 2000-10060852 A 20001206

WO 2001-EP14280 W 20011205

AB The invention relates to a cover layer which is impermeable to active substances and/or a removable protective layer of a transdermal therapeutic system, these layers consisting of a thermoplastic film and contg. either absorption agents and channel forming agents directly or being coated with a polymer support (thermoplastic) contg. these substances. Said polymer support can be applied directly during prodn., either over the entire film or in patterns. The thermoplastic film that is used and the polymer support can consist of identical or different materials.

IT 50-70-4, Sorbitol, biological studies 50-99-7, Glucose, biological studies 57-48-7, Fructose, biological studies 59-23-4, Galactose, biological studies 69-65-8, Mannitol 87-99-0, Xylitol 149-32-6, Erythrol 488-81-3, Ribitol 608-66-2, Dulcitol 3458-28-4, Mannose

RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(absorbing agents and cover layer impermeable to active substances and contg. channel-formers or removable protective layer of a transdermal therapeutic system)

L79 ANSWER 4 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:868791 CAPLUS

DOCUMENT NUMBER: 136:2455

TITLE: A sensor membrane, a method for the preparation thereof, a sensor and a layered membrane structure for such sensor

INVENTOR(S): Clausen, Lydia Dahl

PATENT ASSIGNEE(S): Radiometer Medical A/S, Den.

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001090733	A1	20011129	WO 2001-DK358	20010523
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1292823	A1	20030319	EP 2001-933650	20010523
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
JP 2003534548	T2	20031118	JP 2001-586449	20010523
US 2003070548	A1	20030417	US 2002-301035	20021121
PRIORITY APPLN. INFO.:				
DK 2000-819 A 20000523				
WO 2001-DK358 W 20010523				

OTHER SOURCE(S): MARPAT 136:2455

AB A membrane for a sensor, a method for the prepn. thereof, a layered membrane structure and a sensor for anal. measurements which require controlled analyte permeability are disclosed. The membrane, layered structure and sensor may be used for biol., physiol. and chem. measurements, however, are esp. applicable for electrochem. measurements of glucose, lactate, urea and creatinine. The membrane comprises at least one polymer material, at least one surfactant, and at least one hydrophilic compd. in admixt. to provide a membrane structure in which micelles of hydrophilic compd. lined with thin layers of surfactant are

randomly distributed in the bulk polymer of the membrane. Upon conditioning of the membrane, a structure of a percolating network of pores lined with surfactant is formed which has excellent permeability properties. The membrane has the addnl. advantage of a proper adhesion to polymer encapsulant structures. The membrane is prepd. from a mixt. of at least one polymer material, at least one surfactant, at least one hydrophilic compd. and at least one solvent. A glucose sensor having electrodes and a glucose oxidase layer was prepd. in which the outer membrane was prepd. from a soln. of polyvinyl chloride, trimethylnonyl-triethylene glycol, and diethylene glycol in tetrahydrofuran and cyclohexanone.

IT 50-70-4D, Sorbitol, fatty acid esters

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(membrane contg.; sensor membrane and its prepn. and sensors having layered membrane structure)

IT 50-99-7, D-Glucose, analysis

RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(sensor membrane and its prepn. and sensors having layered membrane structure)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L79 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:676229 CAPLUS

DOCUMENT NUMBER: 135:216017

TITLE: Fatty acid-silicate polymer containing composition

INVENTOR(S): Konishi, Jin-emon

PATENT ASSIGNEE(S): Nippon Zoki Pharmaceutical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1132095	A1	20010912	EP 2001-103553	20010219
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CA 2337484	AA	20010818	CA 2001-2337484	20010216
CN 1312080	A	20010912	CN 2001-104613	20010216
JP 2001302549	A2	20011031	JP 2001-39809	20010216
US 2003018011	A1	20030123	US 2001-788007	20010216

PRIORITY APPLN. INFO.: JP 2000-41327 A 20000218

AB An object of the present invention is to provide a compn. for enhancing the pharmacol. activity of a water-sol. silicate polymer. The pharmacol. compn. of the present invention contains a water-sol. silicate polymer and a satd. fatty acid as effective ingredients and is useful as a medicine such as anti-allergic agent. It is found that the combination of a satd. fatty acid and a water-sol. silicate polymer produces an effect to enhance the pharmacol. activity of a water-sol. silicate polymer. Since the compn. of the present invention can suppress histamine release induced by a structural change in cell membrane of the mast cell, the compn. has an excellent organism maintaining function such as cell protecting action and, therefore, is useful as a medicine such as anti-allergic agent.

IT 50-70-4, Sorbitol, biological studies 50-99-7, Glucose, biological studies 57-48-7, Fructose, biological studies 59-23-4, Galactose, biological studies 69-65-8, Mannitol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anti-allergy compns. contg. fatty acids and silicate polymers and saccharides)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L79 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:568970 CAPLUS

DOCUMENT NUMBER: 129:200179

TITLE: Methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes

INVENTOR(S): Stevens, Raymond; Quan, Cheng

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: PCT Int. Appl., 121 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 11

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9836263	A1	19980820	WO 1998-US2777	19980213
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9861627	A1	19980908	AU 1998-61627	19980213
EP 1007943	A1	20000614	EP 1998-906389	19980213
R: CH, DE, FR, GB, LI				

PRIORITY APPLN. INFO.: US 1997-38383P P 19970214  
WO 1998-US2777 W 19980213

AB The present invention relates to methods and compns. for the direct detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes. The invention provides biopolymeric materials comprising a plurality of polymd. self-assembling monomers and one or more protein ligands, wherein the biopolymeric materials change color in the presence of analyte. In some embodiments, the protein ligands are selected from the group consisting of peptides, proteins, antibodies, receptors, channels, and combinations thereof, although the present invention contemplates all protein ligands. In specific embodiments, the antibodies of the presently claimed invention are directed against Chlamydia.

IT 50-70-4, D-Glucitol, analysis 59-23-4,

Galactose, analysis

RL: ANT (Analyte); ARU (Analytical role, unclassified); PRP (Properties); ANST (Analytical study)

(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

IT 50-99-7, D-Glucose, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L79 ANSWER 7 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:864936 CAPLUS

DOCUMENT NUMBER: 123:265006

TITLE: Filtering materials for air filters

INVENTOR(S): Sumioka, Masayuki; Ootsuka, Kazuhiko; Asahi, Tsukasa

PATENT ASSIGNEE(S): Nitta Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07194911	A2	19950801	JP 1994-283181	19941117

PRIORITY APPLN. INFO.: JP 1993-298243 19931129

AB Filters having adhered polyhydric alcs. or their derivs. are claimed. Preferably, the alcs. (esp. polyhydric alcs. having .gtoreq.2 asym. C) or their derivs. are contained in amts. of 0.2-23% of the filter wt., and furthermore the filters are made from glass fibers of diam. 0.2-12 .mu.m by wet-papermaking process. Air filters comprising the materials are also claimed. The filters are useful for trapping of B.

IT 50-70-4, D-Sorbitol, uses 50-99-7, **Glucose**, uses 57-48-7, D-Fructose, uses 69-65-8, D-Mannitol 608-66-2, Galactitol  
RL: DEV (Device component use); MOA (Modifier or additive use);  
USES (Uses)  
(**glass** fiber filters coated with polyhydric alc. (derivs.)  
for boron trapping and air filters)

L79 ANSWER 8 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1985:100687 CAPLUS  
DOCUMENT NUMBER: 102:100687  
TITLE: Bioavailability of sulfamethoxazole from **sugar glass** dispersions  
AUTHOR(S): Meshali, M.; Ghanem, A.; Ibraheem, Y.  
CORPORATE SOURCE: Fac. Pharm., Univ. Mansoura, Egypt  
SOURCE: Journal of Drug Research (1983), 14(1-2), 239-42  
CODEN: JDGRAX; ISSN: 0368-1866  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The bioavailability of sulfamethoxazole (I) [723-46-6] from sugar glass dispersions was detd. in humans by using the urinary excretion method. Glucose [50-99-7] and sorbitol [50-70-4] were used as sugars. The solid dispersions in a 1:1 drug-sugar ratio were prepd. The cumulative amts. of unmetabolized I excreted in urine following the oral administration of free I, glucose-I and sorbitol-I dispersions were measured. Values of std. deviations show that there is no interindividual variation in the absorption of I. Solid dispersions of I with sugars can markedly enhance the rate and extent of its absorption in humans.

IT 50-70-4, biological studies 50-99-7, biological studies  
RL: BIOL (Biological study)  
(**glass** dispersions contg., sulfamethoxazole bioavailability  
from)

L79 ANSWER 9 OF 37 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN DUPLICATE 2

ACCESSION NUMBER: 2002-19307 DRUGU P G  
TITLE: A biodegradable injectable implant sustains systemic and ocular delivery of an aldose reductase inhibitor and ameliorates biochemical changes in a galactose-fed rat model for diabetic complications.  
AUTHOR: Aukunuru J V; Sunkara G; Ayalasomayajula S P; DeRuiter J; Clark R C; Kompella U B  
CORPORATE SOURCE: Univ.Nebraska; Univ.Auburn  
LOCATION: Omaha, Neb.; Auburn, Ala., USA



SOURCE: Pharm.Res. (19, No. 3, 278-85, 2002) 7 Fig. 1 Tab. 30 Ref.  
CODEN: PHREEB ISSN: 0724-8741  
AVAIL. OF DOC.: Department of Pharmaceutical Sciences, University of Nebraska  
Medical Center, Omaha, Nebraska 68198-6025, U.S.A. (U.B.K.).  
(e-mail: ukompell@unmc.edu).  
LANGUAGE: English  
DOCUMENT TYPE: Journal

## ABSTRACT:

Exposure to benzoylamino phenylsulfonyl glycine (BAPSG) implant, fabricated with poly (DL-lactic-co-glycolic acid) (PLGA), reduced **galactitol** levels and vascular endothelial growth factor (VEGF) expression in retinal pigment epithelial ARPE-19 cells in vitro. Implant fabrication decreased the **\*\*\*glass\*\*\*** transition temperature of the polymer, but did not affect the melting point of the **drug**. The in vivo sustained **drug** release in plasma and ocular tissues showed correlation with in vitro **\*\*\*drug\*\*\*** release. S.c. injection of BAPSG implant reduced **\*\*\*galactitol\*\*\*** levels, GSH depletion, VEGF secretion and cataract score in **\*\*\*galactose\*\*\*** -fed rats in vivo. Results indicate the efficacy of BAPSG implant in normalizing short-term end-points in **galactose**-fed rat model for diabetic complications.

SECTION HEADING: P Pharmacology  
G Galenics

CLASSIF. CODE: 8 Pharmacokinetics  
29 Pharmaceutics

CONTROLLED TERM:  
[01] DR0033832 \*RN; DIABETES \*OC; CARBOHYDRATE-METAB.DISORDER \*OC;  
PANCREOPATHY \*OC; GALACTITOL \*FT; RETINA \*FT; IN-VITRO \*FT;  
TEMPERATURE \*FT; IN-VIVO \*FT; RELEASE \*FT; RATE \*FT;  
BLOOD-PLASMA \*FT; CONC. \*FT; S.C. \*FT; GSH \*FT; RAT \*FT; EYE  
\*FT; INJECTION \*FT; LAB.ANIMAL \*FT; PH \*FT; OC \*FT

FIELD AVAIL.: AB; LA; CT  
FILE SEGMENT: Literature

L79 ANSWER 10 OF 37 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-45393 DRUGU G

TITLE: An investigation into the thermal and analytical techniques  
used in the development of lyophilised protein  
pharmaceuticals.

AUTHOR: McMahon D L M; Craig D Q M; Kett V L; Ward K R

CORPORATE SOURCE: Univ.Queens; Biopharma-Tech.

LOCATION: Belfast; Winchester, U.K.

SOURCE: J.Pharm.Pharmacol. (55, Suppl., S25, 2003) 1 Tab. 2 Ref.  
CODEN: JPPMAB ISSN: 0022-3573

AVAIL. OF DOC.: School of Pharmacy, Queens University Belfast, 97 Lisburn  
Road, Belfast BT9 7BL, Northern Ireland.

LANGUAGE: English  
DOCUMENT TYPE: Journal

## ABSTRACT:

Modulated temperature DSC, freeze-drying microscopy, DTA and freezing resistance analysis were used to evaluate frozen excipient (dextran (70 k), dextran (9500), PEG (1000), PEG (10 k) and **mannitol glucose**) solutions with regard to **glass** transition (Tg) and collapse temperatures (Tc). Excipients were included in formulations of a model protein, lactate dehydrogenase. There was some correlation between Tg and collapse range of the solutions tested, with different techniques being more appropriate for some samples. Structural differences between excipients meant

that correlation between thermal softening and physical collapse was better in the case of high molecular weight polymers. Thermal stabilization by excipients will not always ensure protection of the protein. (conference abstract: 140th British **Pharmaceutical** Conference, Harrogate, U.K., September, 15-17, 2003). (No EX).

SECTION HEADING: G Galenics

CLASSIF. CODE: 29 Pharmaceutics

CONTROLLED TERM:

IN-VITRO \*FT; AUXILIARY-INGREDIENT \*FT; STABILITY \*FT;  
PHARMACEUTICS \*FT  
[01] DEXTRAN \*OC; DEXTRAN \*RN; OC \*FT  
[02] POLYETHYLENE-GLYCOL \*OC; PEG \*RN; OC \*FT  
[03] MANNITOL \*OC; GLUCOSE \*OC; MANNITOL \*RN; DIURETICS \*FT;  
LAXATIVES \*FT; OC \*FT

CAS REGISTRY NO.: 69-65-8

FIELD AVAIL.: AB; LA; CT

FILE SEGMENT: Literature

L79 ANSWER 11 OF 37 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2001-40420 DRUGU G

TITLE: Selection of excipients for melt extrusion with two poorly water-soluble drugs by parameter calculation and thermal analysis.

AUTHOR: Forster A; Hempenstall J; Tucker I; Rades T

CORPORATE SOURCE: Univ.Otago; GlaxoSmithKline

LOCATION: Dunedin, N.Z.; Stevenage, U.K.

SOURCE: Int.J.Pharm. (226, No. 1-2, 147-61, 2001) 5 Fig. 6 Tab. 24  
Ref.

CODEN: IJPHDE ISSN: 0378-5173

AVAIL. OF DOC.: Medicines Research Centre, Gunnels Wood Road, Stevenage SG1 2 NY, England. (e-mail: aqf1781@gsk.com).

LANGUAGE: English

DOCUMENT TYPE: Journal

ABSTRACT:

A study was carried out to determine the miscibility of **drug** and excipient to predict if **glass** solutions are likely to form when the \*\*\*drug\*\*\* and excipient are melt extracted. Indometacin (Sigma-Chem.) and lacidipine (GlaxoSmithKline) were used as model **drugs**. The excipients studied included, polyvinyl alcohol (PVA; Sigma-Chem.), PEG 8000, PEG 10000, polyvinylpyrrolidone K12 (PVP, polyvidone) (all Sigma-Chem.), citric acid, **glucose**, lactose, **mannitol**, PVP K30, sucrose (all GlaxoSmithKline) and polyvinylpyrrolidone-co-vinyl-acetate (PVP/VA; ISP). The study showed that combining calculation of Hansen solubility parameters with thermal analysis of **drug**/excipient miscibility could be successfully applied to predict formation of **glass** solutions with melt extrusion.

SECTION HEADING: G Galenics

CLASSIF. CODE: 29 Pharmaceutics  
70 Analysis

CONTROLLED TERM:

GLASS \*FT; TRANSITION \*FT; TEMPERATURE \*FT; MODEL \*FT;  
SOLUBILITY \*FT; MELTING \*FT; PHARMACEUTICS \*FT  
[01] INDOMETACIN \*OC; SIGMA-CHEM. \*FT; INDOMETAC \*RN;  
ANTIINFLAMMATORIES \*FT; ANTIPYRETICS \*FT; ANTIRHEUMATICS \*FT;  
PROSTAGLANDIN-ANTAGONISTS \*FT; OC \*FT

CAS REGISTRY NO.: 53-86-1

[02] LACIDIPINE \*OC; GLAXOSMITHKLINE \*FT; LACIDIPIN \*RN;  
CALCIUM-ANTAGONISTS \*FT; HYPOTENSIVES \*FT; OC \*FT  
CAS REGISTRY NO.: 103890-78-4  
[03] POLYETHYLENE-GLYCOL \*OC; SIGMA-CHEM. \*FT; PEG \*RN; MOL. \*FT;  
WEIGHT \*FT; AUXILIARY-INGREDIENT \*FT; PHARMACEUTICS \*FT; OC  
\*FT  
[04] POLYVIDONE \*OC; GLAXOSMITHKLINE \*FT; POLYVIDON \*RN; MOL. \*FT;  
WEIGHT \*FT; AUXILIARY-INGREDIENT \*FT; PHARMACEUTICS \*FT;  
BLOOD-SUBSTITUTES \*FT; OC \*FT  
[05] POLYVINYLALCOHOL \*OC; SIGMA-CHEM. \*FT; PVA \*RN;  
AUXILIARY-INGREDIENT \*FT; PHARMACEUTICS \*FT; OC \*FT  
[06] CITRATE \*OC; GLAXOSMITHKLINE \*FT; CITRATE \*RN;  
AUXILIARY-INGREDIENT \*FT; PHARMACEUTICS \*FT;  
PENETRATION-ENHANCERS \*FT; OC \*FT  
CAS REGISTRY NO.: 77-92-9  
[07] LACTOSE \*OC; GLAXOSMITHKLINE \*FT; LACTOSE \*RN;  
AUXILIARY-INGREDIENT \*FT; PHARMACEUTICS \*FT; OC \*FT  
[08] GLUCOSE \*OC; GLAXOSMITHKLINE \*FT; GLUCOSE \*RN;  
AUXILIARY-INGREDIENT \*FT; PHARMACEUTICS \*FT; OC \*FT  
[09] SUCROSE \*OC; GLAXOSMITHKLINE \*FT; SUCROSE \*RN;  
AUXILIARY-INGREDIENT \*FT; PHARMACEUTICS \*FT; OC \*FT  
[10] POLYVIDONE-POLYVINYL-ACETATE \*OC; ISP \*FT; POLYVIPVA \*RN;  
AUXILIARY-INGREDIENT \*FT; PHARMACEUTICS \*FT; OC \*FT  
FIELD AVAIL.: AB; LA; CT  
FILE SEGMENT: Literature

L79 ANSWER 12 OF 37 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 1996-48041 DRUGU G  
TITLE: Freeze-drying of itraconazole-loaded nanosphere suspensions:  
a feasibility study.  
AUTHOR: Chasteigner S de; Cave G; Fessi H; Devissaguet J P; Puisieux  
F  
CORPORATE SOURCE: URA-CNRS; Univ.Paris; Univ.Picardie  
LOCATION: Chatenay Malabry, Amiens; Lyons, Fr.  
SOURCE: Drug Dev.Res. (38, No. 2, 116-24, 1996) 6 Fig. 2 Tab. 41 Ref.  
CODEN: DDREDK ISSN: 0272-4391  
AVAIL. OF DOC.: URA CNRS 1218, Faculte de Pharmacie, Universite de Paris XI,  
5, avenue Jean-Baptiste Clement, 92 290 Chatenay-Malabry,  
France. (J.P.D.).  
LANGUAGE: English  
DOCUMENT TYPE: Journal

## ABSTRACT:

**Glucose**, dextran and **mannitol** (all Prolabo), sucrose and trehalose (both Sigma-Chem.) were evaluated in the freeze-drying of itraconazole-loaded poly-epsilon-caprolactone (PeC, Aldrich) nanosphere suspensions, in a preclinical study. Addition of the carbohydrates partially protected the colloidal suspension, with, at best, 30% itraconazole (Janssen) being released in the presence of 10% **glucose** or sucrose.

\*\*\*Drug\*\*\* desorption was the principal destabilizing factor during freeze-drying. Use of the anionic surfactant sodium deoxycholate (DOCNa, Sigma-Chem.) in the presence of 10% sucrose completely stabilized the itraconazole-loaded nanospheres after freeze-drying, with no **drug** desorption. Itraconazole may find use as an antifungal in immunocompromised patients.

SECTION HEADING: G Galenics

CLASSIF. CODE: 29 Pharmaceutics  
55 Fungicides

CONTROLLED TERM:

[01] IN-VITRO \*FT; FORMULATION \*FT; NANOSPHERE \*FT; LYOPHILIZATION  
\*FT; SUSPENSION \*FT; PHARMACEUTICS \*FT  
[02] GLUCOSE \*OC; PROLABO \*FT; GLUCOSE \*RN;  
CRYOPROTECTANT \*FT; OC \*FT  
[03] DEXTRAN \*OC; PROLABO \*FT; DEXTRAN \*RN; CRYOPROTECTANT \*FT; OC  
\*FT  
[04] MANNITOL \*OC; PROLABO \*FT; MANNITOL \*RN;  
DIURETICS \*FT; LAXATIVES \*FT; OC \*FT  
CAS REGISTRY NO.: 69-65-8  
[05] SUCROSE \*OC; SIGMA-CHEM. \*FT; SUCROSE \*RN; OC \*FT  
[06] TREHALOSE \*OC; SIGMA-CHEM. \*FT; TREHALOSE \*RN; CRYOPROTECTANT  
\*FT; OC \*FT  
[07] ITRACONAZOLE \*OC; JANSSEN \*FT; ITRACONAZ \*RN; FUNGICIDES \*FT;  
OC \*FT  
CAS REGISTRY NO.: 84625-61-6  
[08] POLYCAPROLACTONE \*OC; ALDRICH \*FT; POLYCAPRO \*RN; OC \*FT  
DEOXYCHOLATE \*OC; SODIUM \*OC; DEOXYCHOL \*RN; SODIUM-SALT \*FT;  
CRYOPROTECTANT \*FT; CHOLAGOGUES \*FT; ANTIINFLAMMATORIES \*FT;  
PENETRATION-ENHANCERS \*FT; OC \*FT  
CAS REGISTRY NO.: 83-44-3  
FIELD AVAIL.: AB; LA; CT  
FILE SEGMENT: Literature

L79 ANSWER 13 OF 37 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 1986-37737 DRUGU G A

TITLE: Determination of the Antileukemia Agents Cytarabine and  
Azacitidine and their Respective Degradation Products by  
High-Performance Liquid Chromatography.

AUTHOR: Kissinger L D; Stemm N L

CORPORATE SOURCE: Upjohn

LOCATION: Kalamazoo, Michigan, United States

SOURCE: J.Chromatogr. (353, 309-18, 1986) 7 Fig. 2 Tab. 10 Ref.

CODEN: JOCRAM ISSN: 0378-4347

AVAIL. OF DOC.: Control Research and Development, The Upjohn Company,  
Kalamazoo, MI 49001 U.S.A.

LANGUAGE: English

DOCUMENT TYPE: Journal

#### ABSTRACT:

A reversed-phase HPLC method with UV detection was developed for the assay of  
cytarabine (Ara-C, Upjohn) and azacytidine (5-AC, Upjohn) as well as their  
major degradation products in bulk **drugs** and **pharmaceutical**  
formulations (Ara-C as Cytosar-U sterile powder and S-AC in combination with  
\*\*\*mannitol\*\*\* (M) as Mylosar sterile powder). Samples of 5-AC in purified  
water USP, bacteriostatic water for injection (BWFI, Upjohn), lactated Ringer's  
injection USP (LRI, Travenol), 5% dextrose injection USP (Abbott) and 0.9% NaCl  
injection USP (Travenol, Abbott) as large volume parenteral (LVP) solutions in  
\*\*\*glass\*\*\* bottles and plastic bags were analyzed to determine the 3  
first-order rate constants associated with its decomposition.

SECTION HEADING: G Galenics  
A Analysis

CLASSIF. CODE: 5 Analysis  
25 Neoplasia  
29 Pharmaceutics

#### CONTROLLED TERM:

[01] IN-VITRO \*FT; QUANT. \*FT; DET. \*FT; ANALYSIS \*FT; HPLC \*FT;  
POWDER \*FT; IMPURITY \*FT; DECOMPOSITION \*FT; CHROMATOGRAPHY  
\*FT; PHARM.PREP. \*FT  
CYTARABINE \*OC; SYTOSAR-U \*OC; UPJOHN \*FT; CYTOSTATICS \*FT;

[02] VIRUCIDES \*FT; CYTARABIN \*RN; OC \*FT  
AZACYTIDINE \*OC; MYLOSAR \*OC; UPJOHN \*FT; MANNITOL \*RC;  
COMB.PREP. \*FT; STABILITY \*FT; INJECTABLE \*FT; INFUSION \*FT;  
TRAVENOL \*FT; ABBOTT \*FT; KINETICS \*FT; TEMPERATURE \*FT;  
PH-PK \*FT; PHARM.PREP. \*FT; ANTIBIOTICS \*FT; CYTOSTATICS \*FT;  
AZACYTIDI \*RN; OC \*FT  
[03] SUGAR \*FT; IMIDATE \*FT; UREA \*FT; GUANIDINE \*FT; C-AMIDE \*FT;  
OC \*FT  
[04] ARABINOSYLURACIL \*OC; VIRUCIDES \*FT; ARAURACIL \*RN; OC \*FT  
FIELD AVAIL.: AB; LA; CT; MPC  
FILE SEGMENT: Literature

L79 ANSWER 14 OF 37 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 1984-14462 DRUGU A

TITLE: Simultaneous Determination of Narcotics, Adulterants and  
Diluents in Street Samples by Means of Gas Chromatography  
with Capillary Columns.

AUTHOR: Comparini I B; Centini F; Pariali A

CORPORATE SOURCE: Farmitalia-Erba

LOCATION: Siena, Milan, Italy

SOURCE: J.Chromatogr. (279, 609-13, 1983) 3 Fig. 2 Tab. 9 Ref.

CODEN: JOCRAM ISSN: 0378-4347

AVAIL. OF DOC.: Institute of Forensic Medicine, Second Chair, Policlinico Le  
Scotte, University of Siena, 53100 Siena, Italy.

LANGUAGE: English

DOCUMENT TYPE: Journal

#### ABSTRACT:

A capillary column GLC procedure combined with flame-ionization detection was developed for the simultaneous determination of ephedrine, phenmetrazine, caffeine, diphenhydramine, lidocaine, procaine, methaqualone, cocaine, codeine, acetylcodeine, morphine, thebaine, monoacetylmorphine, heroin, quinine, papaverine, strychnine and narcotine and several dilutants. The procedure was used in the analysis of street heroin. (congress).

SECTION HEADING: A Analysis

CLASSIF. CODE: 4 Analgesics  
5 Analysis

#### CONTROLLED TERM:

QUANT. \*FT; DET. \*FT; ANALYSIS \*FT; GLC \*FT; CHROMATOGRAPHY  
\*FT

[01] EPHEDRINE \*OC; SYMPATHOMIMETICS \*FT; EPHEDRINE \*RN; OC/FT  
\*02\* PHENMETRAZINE \*OC; ANORECTICS \*FT; PHENMETRA \*RN; OC/FT  
\*03\* CAFFEINE \*OC; PSYCHOSTIMULANTS \*FT; PSYCHOTONICS \*FT;  
ANALEPTICS \*FT; DIURETICS \*FT; CAFFEINE \*RN; OC \*FT

[04] DIPHENHYDRAMINE \*OC; ANTIHISTAMINES-H1 \*FT; SEDATIVES \*FT;  
DIPHENHYD \*RN; OC \*FT

[05] LIDOCAINE \*OC; ANTIARRHYTHMICS \*FT; LOCAL-ANESTHETICS \*FT;  
LIDOCAINE \*RN; OC \*FT

[06] PROCAINE \*OC; LOCAL-ANESTHETICS \*FT; ANALGESICS \*FT; PROCAINE  
\*RN; OC \*FT

[07] METHAQUALONE \*OC; SEDATIVES \*FT; METHAQUAL \*RN; OC/FT \*08\*  
COCAINE \*OC; LOCAL-ANESTHETICS \*FT; COCAINE \*RN; OC/FT \*09\*  
CODEINE \*OC; ANTITUSSIVES \*FT; ANALGESICS \*FT; NARCOTICS \*FT;  
CODEINE \*RN; OC \*FT

[10] ACETYLCODEINE \*OC; ACCODEINE \*RN; OC/FT \*11\* MORPHINE \*OC;  
ANALGESICS \*FT; NARCOTICS \*FT; SEDATIVES \*FT; MORPHINE \*RN;  
OC \*FT

[12] THEBAINE \*OC; ANALGESICS \*FT; NARCOTICS \*FT; THEBAINE \*RN;  
OC/FT \*13\* ACETYLMORPHINE \*OC; ANALGESICS \*FT; NARCOTICS \*FT;

[14] ACMORPHIN \*RN; OC \*FT  
DIACETYLMORPHINE \*OC; ANALGESICS \*FT; NARCOTICS \*FT;  
DIACETYLM \*RN; OC \*FT  
[15] QUININE \*OC; PROTOZOACIDES \*FT; ANTIPYRETICS \*FT;  
ANTIARRHYTHMICS \*FT; QUININE \*RN; OC \*FT  
[16] PAPAVERINE \*OC; CALCIUM-ANTAGONISTS \*FT; VASODILATORS \*FT;  
SPASMOLYTICS \*FT; PAPAVERIN \*RN; OC \*FT  
[17] STRYCHNINE \*OC; CONVULSANTS \*FT; TONICS \*FT;  
ANTICHOLINESTERASES \*FT; ANALEPTICS \*FT; STRYCHNIN \*RN; OC  
\*FT  
[18] NOSCAPINE \*OC; ANTITUSSIVES \*FT; NARCOTICS \*FT; NOSCAPINE  
\*RN; OC \*FT  
FIELD AVAIL.: AB; LA; CT; MPC  
FILE SEGMENT: Literature

L79 ANSWER 15 OF 37 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED.  
on STN DUPLICATE 4

ACCESSION NUMBER: 1997-0127740 PASCAL  
COPYRIGHT NOTICE: Copyright .COPYRGT. 1997 INIST-CNRS. All rights reserved.  
TITLE (IN ENGLISH): Optimizing the lyophilization cycle and the consequences of collapse on the pharmaceutical acceptability of Erwinia L-asparaginase  
AUTHOR: ADAMS G. D. J.; RAMSAY J. R.  
CORPORATE SOURCE: Centre for Applied Microbiology and Research, Porton Down, Salisbury, Wiltshire, SP4 0JG, United Kingdom  
SOURCE: Journal of pharmaceutical sciences, (1996), 85(12), 1301-1305, 7 refs.  
Conference: Conference on formulations and drug delivery, Boston, Massachusetts (United States), 10 Oct 1995  
ISSN: 0022-3549 CODEN: JPMSAE  
DOCUMENT TYPE: Journal; Conference  
BIBLIOGRAPHIC LEVEL: Analytic  
COUNTRY: United States  
LANGUAGE: English  
AVAILABILITY: INIST-3209A, 354000061105150080  
ABSTRACT: The antileukemia enzyme, Erwinia L-asparaginase, occurs as a tetramer which can be dissociated by the stresses of lyophilization into four subunits (subunit M.sub.r 34 000 Da). Dissociation can be reduced by adding protectants to the formulation to stabilize the biopolymer, while the product should dry to form a **pharmaceutically** elegant, shelf-stable cake which is readily soluble. Using analytical ultracentrifugation, HPLC, and circular dichroism we have related structural dissociation of the enzyme during lyophilization to biological activity. Additives such as **mannitol** prevent ablation loss of vial contents and dry to form cosmetically elegant cakes but provide little biological protection, since during freezing they crystallize and are removed from the preparation. Excipients persisting throughout the cycle in the amorphous state provide improved biological protection, although high molecular weight compounds such as Dextran (M.sub.r 70 000 Da) are most effective only during product freezing or storage. Low molecular weight sugars are protective throughout the cycle although formulations containing **monosaccharides** often exhibit low collapse temperatures (T.sub.c) measured using a freeze-drying microscope or **glass** transition temperatures (T.sub.g.sub.) measured by thermal

analysis, but these formulations distort as drying progresses to form a collapsed, cosmetically unacceptable cake, with reduced activity, poor stability, a high moisture content, and reduced solubility. Collapse can be avoided by formulating with disaccharides, which display higher T.sub.c temperatures than monosaccharides, or drying below T.sub.c. Dried samples which persist in the amorphous state can also collapse when stored above their solid-state collapse temperatures when they decay at a faster rate than predicted by Arrhenius kinetics. The solid-state collapse temperature can be significantly decreased by the diffusion of moisture from the stopper into the dry product resulting in an increase in sample water content. Lyophilization cycle times can be reduced by analyzing collapse characteristics so that the relationship between product temperature and chamber pressure can be controlled so that drying rates can be optimized while ensuring that the product does not melt or collapse during sublimation.

CLASSIFICATION CODE: 002B02A03; Life sciences; Medical sciences; Pharmacology

CONTROLLED TERM: Asparaginase; Formulation; Antineoplastic agent; Freeze drying; Pharmaceutical technology; Preparation

BROADER TERM: Hydrolases; Enzyme

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on STN

ACCESSION NUMBER: 2001-0081259 PASCAL

COPYRIGHT NOTICE: Copyright .COPYRGT. 2001 INIST-CNRS. All rights reserved.

TITLE (IN ENGLISH): Mechanisms of protection of cationic lipid-DNA complexes during lyophilization

AUTHOR: ALLISON S. Dean; ANCHORDOQUY Thomas J.

CORPORATE SOURCE: Center for Pharmaceutical Biotechnology, School of Pharmacy, C238, University of Colorado Health Sciences Center, Denver, Colorado 80262, United States

SOURCE: Journal of pharmaceutical sciences, (2000), 89(5), 682-691, 29 refs.  
Conference: 1999 Macromolecular Drug Delivery Conference, Breckenridge, Colorado (United States), 14 Jul 1999  
ISSN: 0022-3549 CODEN: JPMSAE

DOCUMENT TYPE: Journal; Conference

BIBLIOGRAPHIC LEVEL: Analytic

COUNTRY: United States

LANGUAGE: English

AVAILABILITY: INIST-3209A, 354000093599450140

ABSTRACT: Gene therapy using nonviral vectors offers advantages over viral methods. However, the instability of aqueous suspensions of cationic lipid-DNA complexes is a major problem that must be overcome to develop this therapeutic modality on a pharmaceutical scale. Disaccharides have been reported to protect lipid-DNA complexes during lyophilization, and recovery of transfection correlates with the retention of particle size. However, the mechanism by which disaccharides achieve this protection is not known. The purpose of this study was to investigate the protective mechanism by lyophilizing cationic lipid-DNA complexes with a variety of solutes that have different physical behaviors during the lyophilization process. In

agreement with previous studies, disaccharides conferred protection to lipid-DNA complexes. By contrast, a large polymeric sugar, hydroxyethyl starch, did not protect as well. The level of protection by additives, such as mannitol, that crystallized during lyophilization was also less than that of the disaccharides, but some protection was nonetheless observed. These data suggest that water replacement plays a significant role in protecting complexes during lyophilization. A second mechanism that prevents aggregation by diluting complexes within freeze-concentrated solutions or dried cakes may also contribute to protection. Sample vitrification did not correlate with maintenance of transfection efficiency. Elucidation of the mechanism(s) by which cationic lipid-DNA complexes are protected during lyophilization will permit a rational approach to the development of stable, lyophilized formulations.

CLASSIFICATION CODE: 002B02A03; Life sciences; Medical sciences; Pharmacology

CONTROLLED TERM: **Pharmaceutical** technology; Transfection; In vitro; Dosage form; Animal; Monkey; **Drug** carrier; Physical properties; Chemical properties; Lipids; Cationic site; DNA; Freeze drying; Cryoprotective agent; Particle size; Vehicle(excipient); Ethylene oxide polymer; **Mannitol**; Sucrose; Trehalose; Lactose; **Glucose**; Chemical stability; Chemical structure; Physical structure; **Glass** transition temperature; Structure stability

BROADER TERM: Primates; Mammalia; Vertebrata; Genetics; Gene therapy

L79 ANSWER 17 OF 37 JICST-EPlus COPYRIGHT 2004 JST on STN

ACCESSION NUMBER: 1020865071 JICST-EPlus

TITLE: Characteristics of change in molecular weight of DE-310 which is a polymeric drug with storage time.

AUTHOR: TAKEUCHI MASAHIITO; ASAI MASAHIIDE; TOMITSUKA TOSHIAKI SAKAI HIDEKI; ABE MASAHIKO

CORPORATE SOURCE: Daiichiseiyaku Tokyoseizaigise

SOURCE: Sci. Univ. Tokyo, Graduate School of Sci. and Technol., JPN Zairyo Gijutsu (Material Technology), (2002) vol. 20, no. 5, pp. 242-247. Journal Code: Y0644A (Fig. 6, Tbl. 4, Ref. 14)

CODEN: MTECFQ; ISSN: 0289-7709

PUB. COUNTRY: Japan

DOCUMENT TYPE: Journal; Article

LANGUAGE: Japanese

STATUS: New

## ABSTRACT:

Carboxymethyldextran **polyalcohol** camptothecin conjugate, which is a novel polymeric **drug**, was synthesized, and is being developed as a code of DE-310. We studied on the effects of storage temperature, excipients, and water content on the change in weight-average molecular weight, Mw, of lyophilized samples containing DE-310. Mw of DE-310 in lyophilized samples with excipients increased with storage time, and relationship between the rate of the increment in Mw and storage temperature was able to be expressed as Arrhenius plot. In addition, the sample having high **glass** transition temperature, Tg, showed low degree of the increment in Mw. The lyophilized samples with disaccharides were higher Tg than one of samples with \*\*\*monosaccharides\*\*\* or sugar alcohols. The lyophilized sample with maltose showed the highest Tg in the samples studied, and it was found that maltose especially suppressed increasing in Mw with storage time. (author abst.)



CLASSIFICATION: GW16010A (615.277.3)  
CONTROLLED TERM: drug; polymeric agent; molecular weight; glass transition point; freeze drying; antitumor drug; dextran; spacer; amidation; time course; temperature; disaccharide; water content; Arrhenius equation; conservation; glucoside; pyranoside; reducing sugar  
BROADER TERM: functional polymer; macromolecule; mass (mechanical quantity); mechanical quantity; transition temperature; thermodynamic property; drying; glucan; glycoside; polysaccharide; carbohydrate; object; chemical reaction; variation; oligosaccharide; content; characteristic; formula  
SUPPLEMENTARY TERM: conservation (property)

L79 ANSWER 18 OF 37 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
DUPLICATE  
ACCESSION NUMBER: 2000:30487621 BIOTECHNO  
TITLE: Effect of DNA complexation and freeze-drying on the physicochemical characteristics of cationic liposomes  
AUTHOR: Cortesi R.; Esposito E.; Nastruzzi C.  
CORPORATE SOURCE: Prof. C. Nastruzzi, Inst. Chimica Tecnologia Farmaco, via del Liceo, 06100 Perugia, Italy.  
SOURCE: Antisense and Nucleic Acid Drug Development, (2000), 10/3 (205-215), 15 reference(s)  
CODEN: ANADF5 ISSN: 1087-2906  
DOCUMENT TYPE: Journal; Article  
COUNTRY: United States  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ABSTRACT: We describe the use of **saccharides**, such as sorbitol, **mannitol**, sucrose, maltodextrin, and dextran, as cyoprotectants. for freeze-drying cationic liposomes. **Saccharides** can protect liposomes either by interacting with phospholipid headgroups or by forming an amorphous **glass** surrounding the vesicles, thus preventing aggregation, mechanical rupture of membrane, fusion of liposomes, and **drug** leakage. We have particularly considered liposome characteristics, such as size, zeta potential, and ability in complexing DNA, before and after freeze-drying. Our study indicates that cationic liposomes are able to maintain liposome characteristics after lyophilization and rehydration and maintain the ability to complex DNA even if the strength of the interaction forces was of lower intensity with respect to liposomes before lyophilization.  
CONTROLLED TERM: \*liposome; \*DNA binding; \*freeze drying; carbohydrate; cation; cryoprotective agent; dextran; drug carrier; maltodextrin; mannitol; phospholipid; sorbitol; sucrose; cryoprotection; drug transport; membrane fusion; membrane rupture; physical chemistry; zeta potential; article; priority journal  
CAS REGISTRY NUMBER: (dextran) 87915-38-6, 9014-78-2; (maltodextrin) 9050-36-6; (mannitol) 69-65-8, 87-78-5; (sorbitol) 26566-34-7, 50-70-4, 53469-19-5; (sucrose) 122880-25-5, 57-50-1

L79 ANSWER 19 OF 37 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
ACCESSION NUMBER: 2001:32737976 BIOTECHNO  
TITLE: Corynebacterium diphtheriae threats in cancer patients  
AUTHOR: Mattos-Guaraldi A.L.; Formiga L.C.D.; Camello T.C.F.; Pereira G.A.; Hirata R. Jr.; Dias L.M.D.; Halpern M.

CORPORATE SOURCE: A.L. Mattos-Guaraldi, Faculdade de Ciencias Medicas, Univ.do Estado do Rio de Janeiro, Av. 28 Setembro 87-Fundos, 3 andar, CEP 20.551-030 Rio Janeiro, Brazil. E-mail: guaraldi@uerj.br

SOURCE: Revista Argentina de Microbiologia, (2001), 33/2 (96-100), 24 reference(s)  
CODEN: RAMID4 ISSN: 0325-7541

DOCUMENT TYPE: Journal; Article

COUNTRY: Argentina

LANGUAGE: English

SUMMARY LANGUAGE: English; Spanish

ABSTRACT: The aim of this study was to determine the bacteriological properties of *Corynebacterium diphtheriae* strains isolated from bronchiole washing and cancer lesions. Bacteriological characterization included fluorescence/double sugar urease (King/DSU) screening tests, pyrazinamidase (PYZ), CAMP- reactions and radial immunodiffusion toxigenicity assay. Microorganisms produced fluorescence under ultraviolet light and were catalase positive: urea and aesculin hydrolysis negative; fermentation of glucose, maltose and sucrose and no fermentation of mannitol and xylose; PYZ and CAMP reaction negative. The API-Coryne system was used for bacterial preliminary identification at local hospital laboratory and produced numerical profiles 1010325 and 0010325 for sucrose positive *C. diphtheriae* var. *mitis* (nitrate positive) and *C. diphtheriae* var. *belfanti* (nitrate negative), respectively. The hemagglutination, adherence to glass and polystyrene assays evaluated adhesive characteristics. Strains were toxigenic and able to adhere to glass, polystyrene and human erythrocyte surfaces (titer 4). *C. diphtheriae* strains isolated from cancer patients expressed adhesive characteristics similar to strains isolated from immunocompetent hosts. Circulation of toxigenic *C. diphtheriae* continues to present a threat for children and adults including patients with cancer in hospital environment. Laboratories should remain alert to the possibility of isolation of diphtheria bacilli from adults with neoplastic disease.

CONTROLLED TERM: \**Corynebacterium diphtheriae*; \*cancer patient; \*bacterium adherence; \*bacterial infection; tracheobronchial toilet; immunodiffusion; toxicity; ultraviolet radiation; fermentation; hemagglutination; erythrocyte; hospital laboratory; bacterium identification; blastoma; basal cell carcinoma; human; nonhuman; male; female; controlled study; aged; adult; article; urease; pyrazinamidase; amidase; cyclic AMP; catalase; urea; esculin; **glucose**; maltose; sucrose; **mannitol**; **xylose**; **glass**; polystyrene; nitrate; unclassified **drug**

CAS REGISTRY NUMBER: (urease) 9002-13-5; (pyrazinamidase) 39419-71-1; (amidase) 9012-56-0; (cyclic AMP) 60-92-4; (catalase) 9001-05-2; (urea) 57-13-6; (esculin) 531-75-9; (glucose) 50-99-7, 84778-64-3; (maltose) 16984-36-4, 69-79-4; (sucrose) 122880-25-5, 57-50-1; (mannitol) 69-65-8, 87-78-5; (xylose) 25990-60-7, 58-86-6; (polystyrene) 9003-53-6; (nitrate) 14797-55-8

L79 ANSWER 20 OF 37 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
ACCESSION NUMBER: 2003-22896 BIOTECHDS

TITLE: New DNA pharmaceutical agent dosage form, having a dense core element coated with a solid reservoir medium, useful for preventing and/or treating disorders, such as an infectious disease, cancer, allergy or autoimmune disease;  
plasmid, DNA or protein transfer and expression in host cell for nucleic acid vaccine and gene therapy

AUTHOR: CATCHPOLE I R

PATENT ASSIGNEE: GLAXO GROUP LTD

PATENT INFO: WO 2003061629 31 Jul 2003

APPLICATION INFO: WO 2003-GB336 23 Jan 2003

PRIORITY INFO: GB 2002-1736 25 Jan 2002; GB 2002-1735 25 Jan 2002

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2003-636713 [60]

ABSTRACT: DERWENT ABSTRACT:

NOVELTY - A DNA **pharmaceutical** agent dosage form having a dense core element coated with a solid reservoir medium containing the DNA **pharmaceutical** agent, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a process for the preparation of a DNA **pharmaceutical** agent dosage form, comprising making a solution of DNA **pharmaceutical** agent, reservoir medium, and stabilizing agent that inhibits the degradative effects of free radicals in a solvent, followed by coating the at least one dense core element with the solution, and removing the solvent to form a solid reservoir medium containing the **pharmaceutical** agent and agent that inhibits the degradative effects of free radicals.

WIDER DISCLOSURE - Nucleic acids, polypeptides, vectors, host cells and antibodies used in the methods, are also disclosed.

BIOTECHNOLOGY - Preferred DNA **Pharmaceutical** Agent: The DNA **pharmaceutical** agent dosage form further comprises a stabilizing agent that inhibits the degradative effects of free radicals, where the stabilizing agent is one or both of a metal ion chelator and a free radical scavenger. The metal ion chelating agent is inositol hexaphosphate, tripolyphosphate, succinic and malic acid, ethylenediamine tetraacetic acid (EDTA), tris (hydroxymethyl) amino methane (TRIS), Desferal, diethylenetriaminepentaacetic acid (DPTA) and ethylenediaminidihydroxyphenylacetic acid (EDDHA). The non-reducing free radical scavenger is ethanol, methionine or glutathione. The stabilizing agent that inhibits the degradative effects of free radicals is phosphate buffered ethanol solution in combination with methionine or EDTA, or Tris buffered EDTA in combination with methionine or ethanol. The solid reservoir medium is an amorphous **polyol**, preferably stabilizing **polyol**. The solid biodegradable reservoir medium is a sugar, preferably lactose, **glucose**, sucrose, raffinose or trehalose. The solid reservoir medium is in the form of a **glass**, preferably sugar **glass**. The DNA is supercoiled plasmid DNA that is stabilized such that after storage at 37 degreesC for 4 weeks greater than 50% of the DNA remains in its supercoiled form. The DNA is stabilized such that when released the ratio of monomer:dimer supercoiled form is within the range of 0.8:1.2. The **pharmaceutical** agent is a vaccine. The solid reservoir medium further comprises a vaccine adjuvant, transfection facilitating agent, DNase inhibitor or a crystal poisoner. The adjuvant is CpG, a synthetic imidazoquinolines, tucerasol, cytokines, MPL, QS21, QS7 or oil in water

emulsions. The dense core elements are microbeads of a mean particle diameter of 0.5-10 micrometers, and is a gold or tungsten microbead. Preferred Process: The reservoir medium in the process for preparing a DNA **pharmaceutical** agent dosage is a sugar. The concentration of sugar prior to drying onto the support member is 20-40% w/v. The solvent is demetalated prior to the process.

ACTIVITY - Cytostatic; Antiallergic; Immunosuppressive; Antibacterial. No biological data given.

MECHANISM OF ACTION - Vaccine.

USE - The methods and compositions are useful for preventing and/or treating disorders, such as an infectious disease, cancer, allergy or autoimmune diseases.

EXAMPLE - No relevant example given. (46 pages)

CLASSIFICATION: THERAPEUTICS, Gene Therapy; GENETIC TECHNIQUES and APPLICATIONS, Gene Expression Techniques and Analysis; DISEASE, Cancer; DISEASE, Autoimmune Disease; DISEASE, Other Diseases; PHARMACEUTICALS, Vaccines; THERAPEUTICS, Protein Therapeutics

CONTROLLED TERMS: PLASMID, DNA, PROTEIN TRANSFER, EXPRESSION IN HOST CELL, SOLID RESERVOIR MEDIUM, GOLD, TUNGSTEN MICROBEAD, APPL. NUCLEIC ACID VACCINE, INFECTIOUS DISEASE, CANCER, ALLERGY, AUTOIMMUNE DISEASE THERAPY, PREVENTION, GENE THERAPY TUMOR (22, 39)

L79 ANSWER 21 OF 37 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
ACCESSION NUMBER: 1995-05927 BIOTECHDS

TITLE: The use of non-woven fabrics **matrices** in **xylitol** production from D-**xylose** by immobilized *Candida tropicalis*; addition of D-**glucose** as NADPH source for enhanced **xylitol** productivity; use as a sweetener

AUTHOR: Yahashi Y; Ogawa M; Suzuki T; Kawai K; Takamizawa K; Horitsu H

CORPORATE SOURCE: Univ.Gifu; Univ.Chukyo-Women's

LOCATION: Department of Biotechnology, Faculty of Agriculture, Gifu University, 1-1, Yanagido, 501-11 Japan.

SOURCE: Biotechnol.94 Appl.Biocatal.; (1994) 59-61

CODEN: 9999N

Biotechnology '94, Applied Biocatalysis, Brighton, UK, 4-6 July, 1994.

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT: The application of non-woven fabrics as supports for immobilization of *Candida tropicalis* IFO 0618 for use in **xylitol** production was examined. Yeast cells were inoculated into a 250 ml **glass** column reactor (50 mm by 150 mm), containing 200 ml of production medium (17.2% D-**xylose**, 2.1% yeast extract, 1.5% KH<sub>2</sub>PO<sub>4</sub>, 0.3% (NH<sub>4</sub>)<sub>2</sub>PO<sub>4</sub>, and 0.1% MgSO<sub>4</sub>·7H<sub>2</sub>O, pH 4) to achieve about 10 g/l initial dry cell amount and incubated at 30 deg in a water bath. Aeration was at 700 ml/min providing 90% O<sub>2</sub> gas constantly. The utilization of non-woven fabrics was superior for cell immobilization without leakage of cells than other immobilization methods tested (calcium alginate and polyacrylamide), though the production rate and yield of **xylitol** were not sufficient. In order to enhance **xylitol** productivity using non-woven fabrics, D-**glucose** was fed in the medium as a NADPH source. Maximum production rate (2.71 g/l/hr) and maximum yield (96.8%) were obtained by 12 g/day of D-**glucose** feeding. **Xylitol** is an anticariogenic sweetener

that does not need insulin for its digestion in diabetics.  
(4 ref)

CLASSIFICATION: F FOOD; F1 Food and Food Additives; K BIOCATALYSIS; K2 Application  
CONTROLLED TERMS: **XYLITOL** PREP, D-**XYLOSE**, NON-WOVEN FABRIC  
SUPPORT FOR CANDIDA TROPICALIS IMMOBILIZATION, D-**GLUCOSE** ADDITION, APPL. SWEETENER SUGAR FUNGUS YEAST  
(VOL.14, NO.10)

L79 ANSWER 22 OF 37 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

ACCESSION NUMBER: 1992-04060 BIOTECHDS

TITLE: Contributions to the biotechnological production of sweeteners from *Stevia rebaudiana* Bertoni. I. A method for the serial analysis of diterpene glycosides by HPLC; cold methanol extraction of stevioside sweetener from *S. rebaudiana* cell culture and analysis by modified HPL-chromatography

AUTHOR: Striedner J; Czygan F C; \*Braunegg G

LOCATION: Technische Universitaet Graz, Institut fuer Biotechnologie, A-8010 Graz, Petersgasse 12, Austria.

SOURCE: Acta Biotechnol.; (1991) 11, 5, 495-99  
CODEN: ACBTDD

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT: A cold extraction procedure was developed for the extraction of stevioside, a non-caloric sweetener, from cell cultures of *Stevia rebaudiana*. A **glass** column (inner diameter 10 mm) of variable length was filled with a sample (50-1,000 mg) of *S. rebaudiana*, and connected to a solvent distributor hooked up to a solvent reservoir. Depending on their wt., samples were extracted exhaustively using 100-500 ml cold methanol for 7-8 hr. Since *S. rebaudiana* cell cultures often produce substances which interfere with stevioside detection, and since very low stevioside concentrations occur in plant cell cultures, the concentrated raw extracts were placed on thin layer aluminum foils (silica gel 60, 20 x 20 cm) and developed in n-butanol-ethyl acetate-2-propanol-water (35:100:60:30). Compounds in the R<sub>f</sub> range 0.30-0.55 (diterpene glycosides) were removed and eluted from the silica gel with methanol. The filtered samples were subjected to a modified HPLC procedure using acetonitrile-water (86:14). Using a flow rate of 1 ml/min, the total time per run of 30-60 min was shorter than the time needed for sample preparation. (13 ref)

CLASSIFICATION: J CELL CULTURE; J2 Plant Cell Culture; F FOOD ADDITIVES AND SCP; F1 Food Additives and SCP; C CHEMISTRY; C1 Analysis and Structure

CONTROLLED TERMS: STEVIOSIDE SWEETENER ISOL. FROM STEVIA REBAUDIANA BY COLD METHANOL EXTRACTION, ANALYSIS BY **MODIFIED** HPLC  
DITERPENE **GLYCOSIDE** PLANT CYCLOALKANE RING-5 RING-6  
COND.RING BRIDGE-STRUCT. OLEFIN C-ESTER GLYCOSIDE STEROID  
TERPENE CHROMATOGRAPHY

L79 ANSWER 23 OF 37 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 2003:553158 BIOSIS

DOCUMENT NUMBER: PREV200300556431

TITLE: Scientific and technological aspects of aqueous glasses.

AUTHOR(S): Franks, Felix [Reprint Author]

CORPORATE SOURCE: BioUpdate Foundation, 229 Ballards Lane, 25 The Fountains, London, N3 1NL, UK  
bioup@dial.pipex.com

SOURCE: Biophysical Chemistry, (September 2003) Vol. 105, No. 2-3, pp. 251-261. print.

CODEN: BICIAZ. ISSN: 0301-4622.

DOCUMENT TYPE: Article  
General Review; (Literature Review)

LANGUAGE: English

ENTRY DATE: Entered STN: 26 Nov 2003  
Last Updated on STN: 26 Nov 2003

ABSTRACT: The physical nature of a **glass**, as related to stable liquid and crystalline solid phases was defined by Kauzmann in 1948. Since then, **\*\*\*glass\*\*\*** research has been almost exclusively confined to inorganic materials. This review aims to demonstrate that many substances, not falling into the category of classical 'materials', can be rendered into amorphous states. In particular, water itself, but also water soluble and water sensitive organic molecules, some of them biomolecules, can be rendered into supersaturated and solid solutions. New ways of studying and applying amorphisation processes have led to major advances in food and pharmaceutical processing aimed mainly at the stabilisation of labile materials. Because of their molecular similarities to water, polyhydroxy compounds are attracting particular interest as potential **matrix** elements in the preparation of glassy products.

CONCEPT CODE: Genetics - General 03502  
Biochemistry studies - General 10060  
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062  
Biochemistry studies - Proteins, peptides and amino acids 10064  
Biochemistry studies - Carbohydrates 10068  
Pathology - Therapy 12512  
Food technology - General and methods 13502  
Endocrine - Pituitary 17014  
Pharmacology - General 22002

INDEX TERMS: Major Concepts  
Foods; Molecular Genetics (Biochemistry and Molecular Biophysics); Pharmacology

INDEX TERMS: Chemicals & Biochemicals  
2-(4-nitrophenoxy) tetrahydropyran; DNA; Ficoll;  
**arabinose**; cyclodextrin; **fructose**;  
**glucose**; human growth hormone; lactose;  
maltohexaose; maltotriose; **mannitol**;  
polyhydroxy compound; raffinose; **ribose**;  
sorbitol; stachyose; sucrose; trehalose; water;  
**xylose**

INDEX TERMS: Methods & Equipment  
apomorphization: laboratory techniques

INDEX TERMS: Miscellaneous Descriptors  
aqueous glasses; food processing; pharmaceutical processing

REGISTRY NUMBER: 25702-74-3 (Ficoll)  
147-81-9 (**arabinose**)  
12619-70-4 (cyclodextrin)  
57-48-7Q (**fructose**)  
30237-26-4Q (**fructose**)  
50-99-7Q (**glucose**)  
58367-01-4Q (**glucose**)  
12629-01-5 (human growth hormone)  
63-42-3 (lactose)  
34620-77-4 (maltohexaose)  
1109-28-0 (maltotriose)  
69-65-8Q (**mannitol**)  
87-78-5Q (**mannitol**)  
512-69-6 (raffinose)  
50-69-1Q (**ribose**)  
34466-20-1Q (**ribose**)  
93781-19-2Q (**ribose**)

50-70-4 (sorbitol)  
470-55-3 (stachyose)  
57-50-1 (sucrose)  
99-20-7 (trehalose)  
7732-18-5 (water)  
58-86-6Q (**xylose**)  
25990-60-7Q (**xylose**)

L79 ANSWER 24 OF 37 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
ACCESSION NUMBER: 1997:41555 BIOSIS  
DOCUMENT NUMBER: PREV199799333543  
TITLE: Optimizing the lyophilization cycle and the consequences of  
collapse on the pharmaceutical acceptability of Erwinia  
L-asparaginase.  
AUTHOR(S): Adams, Gerald D. J.; Ramsay, J. Richard [Reprint author]  
CORPORATE SOURCE: Centre Applied Microbiol. Research, Porton Down, Salisbury,  
Wiltshire SP4 0JG, UK  
SOURCE: Journal of Pharmaceutical Sciences, (1996) Vol. 85, No. 12,  
pp. 1301-.  
CODEN: JPMSAE. ISSN: 0022-3549.  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 28 Jan 1997  
Last Updated on STN: 28 Jan 1997

ABSTRACT: The antileukemia enzyme, Erwinia L-asparaginase, occurs as a tetramer which can be dissociated by the stresses of lyophilization into four subunits (subunit M-r 34 000 Da). Dissociation can be reduced by adding protectants to the formulation to stabilize the biopolymer, while the product should dry to form a **pharmaceutically** elegant, shelf-stable cake which is readily soluble. Using analytical ultracentrifugation, HPLC, and circular dichroism we have related structural dissociation of the enzyme during lyophilization to biological activity. Additives such as **mannitol** prevent ablation loss of vial contents and dry to form cosmetically elegant cakes but provide little biological protection, since during freezing they crystallize and are removed from the preparation. Excipients persisting throughout the cycle in the amorphous state provide improved biological protection, although high molecular weight compounds such as Dextran (M-r 70 000 Da) are most effective only during product freezing or storage. Low molecular weight sugars are protective throughout the cycle although formulations containing \*\*\*monosaccharides\*\*\* often exhibit low collapse temperatures (T-c) measured using a freeze-drying microscope or **glass** transition temperatures (T-g') measured by thermal analysis, but these formulations distort as drying progresses to form a collapsed, cosmetically unacceptable cake, with reduced activity, poor stability, a high moisture content, and reduced solubility. Collapse can be avoided by formulating with disaccharides, which display higher T, temperatures than **monosaccharides**, or drying below T-c. Dried samples which persist in the amorphous state can also collapse when stored above their solid-state collapse temperatures when they decay at a faster rate than predicted by Arrhenius kinetics. The solid-state collapse temperature can be significantly decreased by the diffusion of moisture from the stopper into the dry product resulting in an increase in sample water content. Lyophilization cycle times can be reduced by analyzing collapse characteristics so that the relationship between product temperature and chamber pressure can be controlled so that drying rates can be optimized while ensuring that the product does not melt or collapse during sublimation.

CONCEPT CODE: Biochemistry methods - Proteins, peptides and amino acids  
10054  
Biochemistry studies - Proteins, peptides and amino acids  
10064  
Biophysics - Molecular properties and macromolecules  
10506  
Biophysics - Bioengineering 10511  
Enzymes - Methods 10804

Pathology - Therapy 12512  
Pharmacology - General 22002  
Pharmacology - Drug metabolism and metabolic stimulators  
22003  
Pharmacology - Clinical pharmacology 22005  
Pharmacology - Blood and hematopoietic agents 22008  
Neoplasms - Therapeutic agents and therapy 24008  
Neoplasms - Blood and reticuloendothelial neoplasms 24010  
Physiology and biochemistry of bacteria 31000

INDEX TERMS: Major Concepts  
Biochemistry and Molecular Biophysics; Enzymology  
(Biochemistry and Molecular Biophysics); Methods and  
Techniques; Pharmacology; Physiology; Tumor Biology

INDEX TERMS: Chemicals & Biochemicals  
L-ASPARAGINASE

INDEX TERMS: Miscellaneous Descriptors  
BACTERIAL L-ASPARAGINASE; DRUG DELIVERY; DRUG  
FORMULATION; ENZYMOLOGY; LYOPHILIZATION CYCLE;  
PHARMACEUTICAL ACCEPTABILITY; PHARMACOLOGY

ORGANISM: Classifier  
Enterobacteriaceae 06702  
Super Taxa  
Facultatively Anaerobic Gram-Negative Rods; Eubacteria;  
Bacteria; Microorganisms  
Organism Name  
Erwinia  
Taxa Notes  
Bacteria, Eubacteria, Microorganisms

REGISTRY NUMBER: 9015-68-3 (L-ASPARAGINASE)

L79 ANSWER 25 OF 37 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
ACCESSION NUMBER: 1985:244957 BIOSIS  
DOCUMENT NUMBER: PREV198579024953; BA79:24953  
TITLE: CHANGES IN ELECTRICAL CONDUCTIVITY OF VARIOUS DRUGS IN  
AQUEOUS FROZEN PHASE 1. THE MEASUREMENT OF EUTECTIC  
TEMPERATURE AND COLLAPSE TEMPERATURE AT AMORPHOUS FREEZING.

AUTHOR(S): INOUE M [Reprint author]; SHIMA K; INAZU K  
CORPORATE SOURCE: SHIONOGI RES LAB, SHIONOGI CO, LTD, FUKUSHIMA-KU, OSAKA  
553, JPN

SOURCE: Yakugaku Zasshi, (1984) Vol. 104, No. 9, pp. 966-972.  
CODEN: YKKZAJ. ISSN: 0031-6903.

DOCUMENT TYPE: Article  
FILE SEGMENT: BA  
LANGUAGE: JAPANESE

ABSTRACT: Changes in the electrical conductivity (conductivity) of various  
\*\*\*drugs\*\*\* [nicotinamide, thiamine, dicethiamin, ascorbic acid, glycine,  
.beta.-alanine, cephalotin, cefamandol, cefazolin, cephaloridine, moxalactam,  
\*\*\*mannitol\*\*\*, **glucose**, **xylose** and maltose] in aqueous  
frozen phase were measured at increasing temperature and the logarithm of the  
conductivity was plotted against reciprocal of absolute temperature. The  
change in the conductivity after the frozen solution being led to its eutectic  
state by either annealing or seeding was examined to obtain eutectic  
temperature. Investigation disclosed the relationship between collapse  
temperature (cp) observed during freeze-drying and the change in the  
conductivity observed in the process of amorphous freezing. Ascorbic acid,  
\*\*\*xylose\*\*\*, etc. when subjected to amorphous freezing showed a bend, while  
cephalothin sodium, cephamandol sodium, etc. exhibited a sharp increase in the  
conductivity at individual cp. When the curve showed a bend, cp varied with  
the concentration of **drug**; this dependence of cp upon concentration  
was not observed in cases when a sharp increase in the conductivity could be  
observed. The sharp increase in the conductivity could be correlated with an  
endothermic peak or DSC [differential scanning calorimetry]. Generation of a  
sharp increase in the conductivity was interpreted to indicate **glass**



transition accompanied with heat absorption in amorphous-frozen state of an aqueous **drug** solution.

CONCEPT CODE: Biochemistry studies - General 10060  
Biochemistry studies - Vitamins 10063  
Biochemistry studies - Proteins, peptides and amino acids 10064  
Biochemistry studies - Carbohydrates 10068  
Biophysics - General 10502  
Biophysics - Methods and techniques 10504  
Biophysics - Molecular properties and macromolecules 10506  
External effects - Temperature as a primary variable - cold 10616  
Pharmacology - General 22002  
Temperature - General measurement and methods 23001  
Chemotherapy - General, methods and metabolism 38502

INDEX TERMS: Major Concepts  
Biochemistry and Molecular Biophysics; Methods and Techniques; Pharmacology  
INDEX TERMS: Miscellaneous Descriptors  
NICOTINAMIDE THIAMIN DICETHIAMIN ASCORBIC-ACID GLYCINE  
BETA ALANINE CEPHALOTHIN CEPHAMANDOL CEFAZOLIN  
CEPHALORIDINE MOXALACTAM MANNITOL GLUCOSE XYLOSE MALTOSE

REGISTRY NUMBER: 98-92-0 (NICOTINAMIDE)  
59-43-8 (THIAMIN)  
50-81-7Q (ASCORBIC-ACID)  
62624-30-0Q (ASCORBIC-ACID)  
56-40-6 (GLYCINE)  
107-95-9 (BETA-ALANINE)  
153-61-7 (CEPHALOTHIN)  
25953-19-9 (CEFAZOLIN)  
50-59-9 (CEPHALORIDINE)  
64952-97-2 (MOXALACTAM)  
69-65-8Q (MANNITOL)  
87-78-5Q (MANNITOL)  
50-99-7Q (GLUCOSE)  
58367-01-4Q (GLUCOSE)  
58-86-6Q (XYLOSE)  
25990-60-7Q (XYLOSE)  
69-79-4 (MALTOSE)  
16984-36-4Q (MALTOSE)

L79 ANSWER 26 OF 37 TOXCENTER COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1997:157461 TOXCENTER  
COPYRIGHT: Copyright 2004 ACS  
DOCUMENT NUMBER: CA12624321093Y  
TITLE: Preparation of drug nanoparticles by spray drying  
AUTHOR(S): Selvaraj, Ulagaraj; Messing, Gary L.  
CORPORATE SOURCE: ASSIGNEE: Messing, Gary L.  
PATENT INFORMATION: WO 9713503 A1 17 Apr 1997  
SOURCE: (1997) PCT Int. Appl., 58 pp.  
CODEN: PIXXD2.  
COUNTRY: UNITED STATES  
DOCUMENT TYPE: Patent  
FILE SEGMENT: CAPLUS  
OTHER SOURCE: CAPLUS 1997:347295  
LANGUAGE: English  
ENTRY DATE: Entered STN: 20011116  
Last Updated on STN: 20020403

ABSTRACT:

The present invention relates to a method for manufg. nanoparticles comprising combining an agent and a **matrix** to form a composite mixt. and spray drying the composite mixt., wherein the nanoparticles are less than about 5000

nm. Suitable agents that can be formulated into nanoparticle include therapeutic and diagnostic agents, cosmetics, dyes, photog. agent, foods, pesticides, among others. Et 3,5-diacetamido-2,4,6-triiodobenzoate 5 g was dissolved in 100 mL DMSO and to this soln., 10 g sucrose dissolved in 10 mL water was added. The soln. was sonicated and then atomized. The atomized droplets were transported through the **glass** tubing at 60-250.degree. to obtain fine particulates.

CLASSIFICATION CODE: 63-6

SUPPLEMENTARY TERMS: Miscellaneous Descriptors

nanoparticle drug **matrix** spray drying  
REGISTRY NUMBER: 1309-48-4 (Magnesia)  
12068-51-8 (Alumina magnesia)  
21645-51-2 (Aluminum hydroxide)  
50-70-4 (D-**Glucitol**)  
50-78-2 (Aspirin)  
50-99-7 (D-**Glucose**)  
53-86-1 (Indomethacin)  
54-21-7 (Sodium salicylate)  
57-11-4 (Octadecanoic acid)  
57-48-7 (**Fructose**)  
57-50-1 (Sucrose)  
60-54-8 (Tetracycline)  
69-65-8 (D-**Mannitol**)  
69-79-4 (Maltose)  
79-41-4Q (derivs., polymers)  
87-79-6 (L-Sorbose)  
112-92-5 (1-Octadecanol)  
144-74-1 (Sulfathiazole sodium salt)  
149-44-0 (Sodium formaldehyde sulfoxylate)  
471-34-1 (Calcium carbonate)  
532-32-1 (Sodium benzoate)  
1406-05-9 (Penicillin)  
1592-23-0 (Calcium stearate)  
2168-75-4 (Ethyl 3,5-diacetamido-2,4,6-triiodobenzoate)  
3458-28-4 (**Mannose**)  
7447-40-7 (Potassium chloride)  
7631-90-5 (Sodium bisulfite)  
7647-14-5 (Sodium chloride (NaCl))  
7681-57-4 (Sodium metabisulfite)  
7727-43-7 (Barium sulfate)  
7772-98-7 (Sodium thiosulfate)  
9000-01-5 (Gum arabic)  
9000-28-6 (Gum ghatti)  
9000-30-0 (Guar gum)  
9000-36-6 (Karaya gum)  
9000-40-2 (Locust bean gum)  
9000-65-1 (Tragacanth gum)  
9002-88-4 (Polyethylene)  
9002-89-5 (Polyvinyl alcohol)  
9003-01-4 (Polyacrylic acid)  
9003-11-6 (Ethylene oxide-propylene oxide copolymer)  
9003-39-8 (PVP)  
9004-34-6 (Cellulose)  
9004-35-7 (Cellulose acetate)  
9004-38-0 (Cellulose acetate phthalate)  
9004-57-3 (Ethyl cellulose)  
9004-64-2 (Hydroxypropyl cellulose)  
9004-65-3 (Hydroxypropyl methyl cellulose)  
9004-67-5 (Methyl cellulose)  
9005-25-8 (Starch)  
9036-66-2 (Arabinogalactan)  
9050-31-1 (Hydroxypropyl methyl cellulose phthalate)  
11099-07-3 (Glycerol stearate)

11138-66-2 (Xanthan gum)  
15687-27-1 (Ibuprofen)  
18323-44-9 (Clindamycin)  
22204-53-1 (Naproxen)  
24937-78-8 (Ethylene-vinyl acetate copolymer)  
25213-24-5 (Vinyl alcohol-vinyl acetate copolymer)  
29679-58-1 (Fenoprofen)  
64044-51-5 (Lactose monohydrate)

REGISTRY NUMBER: 103-90-2; 5965-66-2; 9004-32-4; 9050-04-8

L79 ANSWER 27 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2003-903162 [82] WPIDS  
DOC. NO. CPI: C2003-256635  
TITLE: Composition useful for preservation of e.g. virus  
comprises a **bioactive** material prepared by  
freeze-drying a liquid formulation comprising the  
material by immersion into a cold fluid.  
DERWENT CLASS: A96 **B04** D16  
INVENTOR(S): CARPENTER, J F; PHAM, B V; TRUONG-LE, V  
PATENT ASSIGNEE(S): (MEDI-N) MEDIMMUNE VACCINES INC  
COUNTRY COUNT: 103  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2003087339	A2	20031023	(200382)*	EN	34	C12N000-00	
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS							
LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK							
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR							
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL							
PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU							
ZA ZM ZW							

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003087339	A2	WO 2003-US11447	20030410

PRIORITY APPLN. INFO: US 2002-372242P 20020411

INT. PATENT CLASSIF.:

MAIN: C12N000-00

BASIC ABSTRACT:

WO2003087339 A UPAB: 20031223

NOVELTY - A composition comprising a **bioactive** material is prepared by a process involving:

(1) spraying a liquid formulation comprising the material to form droplets;

(2) freezing the droplets by immersion into a cold fluid; and

(3) drying the droplets to form powder particles.

The **bioactive** material comprises virus, bacteria, cell, or liposomes. An average physical size of the powder particles is 0.5 - 20 micro m.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for an apparatus for preparation of spray freeze dried particles for pulmonary administration comprising: the liquid formulation; nozzle for spraying the liquid formulation to form droplets; cold fluid into which the droplets are immersed to form frozen droplets (1 - 20 micro m); and a drying chamber for drying the frozen droplets.

ACTIVITY - Virucide.

MECHANISM OF ACTION - Vaccine.

USE - For preservation and pulmonary administration of **bioactive** materials such as bacteria, cell, liposomes, virus (e.g. influenza virus, parainfluenza virus, human metapneumovirus, respiratory syncytial virus, corona virus family members, herpes simplex virus, severe acute respiratory syndrome (SARS) virus, cytomegalo virus, or Epstein-Barr virus) (claimed) for treatment of disorders associated with e.g. cold or flu. Used as vaccine.

ADVANTAGE - The composition exhibits improved stability and enhances shelf-life of sensitive biological materials in storage at temperature above freezing (e.g. at 25 deg. C for at least 1 year, or at 4 deg. C for more than 2 years) as the moisture content of the particles is 1 - 5 wt.%. Spray freeze-drying reduces heat stress by processing formulations in a cold environment and providing surface to volume ratio favorable to quick drying. The particles have an average aerodynamic size of 0.5 - 10 (preferably 3) micro m; an average physical diameter of 1 - 20 micro m, and a density less than 0.9 (preferably 0.5 - 0.2) g/cc, hence the **bioactive** material can reach the alveolar sacs deep in the lungs.

Dwg.0/7

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; DCN  
MANUAL CODES: CPI: A12-V01; B04-C03; B04-N02; B07-A02A; B07-A02B;  
B10-A07; B10-E04C; B14-A02; B14-S11; B14-S11A;  
D05-H07

L79 ANSWER 28 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2003-903160 [82] WPIDS  
DOC. NO. CPI: C2003-256633  
TITLE: Dry foam composition useful for preservation of  
**bioactive** material comprises material prepared by  
cooling a formulation of the material, **polyol**  
or polymer; and expanding the formulation followed by  
drying.  
DERWENT CLASS: A96 B04 D16  
INVENTOR(S): TRUONG-LE, V; VU, T  
PATENT ASSIGNEE(S): (MEDI-N) MEDIMMUNE VACCINES INC  
COUNTRY COUNT: 103  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2003087327	A2	20031023	(200382)*	EN	36	C12N000-00	
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW							
US 2003219475	A1	20031127	(200402)			A61K039-245	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003087327	A2	WO 2003-US10989	20030410
US 2003219475	A1	Provisional	US 2002-372236P 20020411
		US 2003-412630	20030410

PRIORITY APPLN. INFO: US 2002-372236P 20020411; US 2003-412630  
20030410

INT. PATENT CLASSIF.:

MAIN: A61K039-245; C12N000-00

SECONDARY: A61K009-127; A61K039-12; A61K039-145; A61K039-215;  
A61K039-23; A61K039-235

## BASIC ABSTRACT:

WO2003087327 A UPAB: 20031223

NOVELTY - A stable dry foam composition comprising a **bioactive** material is prepared by:

(1) cooling a formulation of the material, **polyol** or polymer;

(2) expanding the formulation; and

(3) drying the foam by evaporation, freezing or sublimation.

The **bioactive** material comprises a lipid membrane.

ACTIVITY - Virucide.

MECHANISM OF ACTION - Vaccine.

USE - For preservation of **bioactive** materials such as peptides, proteins, hormones, nucleic acids, antibodies, bacteria, cell suspensions, platelets, liposomes, and viruses (e.g. influenza virus, parainfluenza virus, Adenoassociated virus, adenovirus, human metapneumovirus, respiratory syncytial virus, corona virus family members, herpes simplex virus, severe acute respiratory syndrome (SARS) virus, cytomegalo virus, or Epstein-Barr virus) in lyophilized dry form (claimed) useful as vaccine for treatment of disorders associated with e.g. cold or flu.

ADVANTAGE - The dry foam composition has a moisture content of (0.1 - 5)% and remains stable for at least 1 year in storage at 25 deg. C. The composition is ground powder having an average particle size of 0.1 - 100 (preferably 50 - 100) micro m, hence can reach alveolar sac of the lungs easily and effectively.

Dwg.0/8

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB; DCN

MANUAL CODES: CPI: A12-V01; B04-C02; B04-C03; B04-N02; B07-A02A;  
B07-A02B; B10-A07; B10-E04C; B11-C09; B12-M05;  
B12-M06; B14-A02; B14-S11; B14-S11A; D05-H07

L79 ANSWER 29 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2003-903074 [82] WPIDS  
DOC. NO. CPI: C2003-256547  
TITLE: Composition useful for preservation of e.g. virus  
comprises a **bioactive** material prepared by  
freeze-drying a liquid formulation comprising the  
material by immersion into a cold fluid.  
DERWENT CLASS: A96 B04 D16  
INVENTOR(S): CARPENTER, J F; PHAM, B V; TRUONG-LE, V  
PATENT ASSIGNEE(S): (MEDI-N) MEDIMMUNE VACCINES INC  
COUNTRY COUNT: 103  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC															
WO 2003086443	A1	20031023	(200382)*	EN	35	A61K035-78																
RW:	AT	BE	BG	CH	CY	CZ	DE	DK	EA	EE	ES	FI	FR	GB	GH	GM	GR	HU	IE	IT	KE	LS
	LU	MC	MW	MZ	NL	OA	PT	RO	SD	SE	SI	SK	SL	SZ	TR	TZ	UG	ZM	ZW			
W:	AE	AG	AL	AM	AT	AU	AZ	BA	BB	BG	BR	BY	BZ	CA	CH	CN	CO	CR	CU	CZ	DE	DK
	DM	DZ	EC	EE	ES	FI	GB	GD	GE	GH	GM	HR	HU	ID	IL	IN	IS	JP	KE	KG	KP	KR
	KZ	LC	LK	LR	LS	LT	LU	LV	MA	MD	MG	MK	MN	MW	MX	MZ	NI	NO	NZ	OM	PH	PL
	PT	RO	RU	SC	SD	SE	SG	SK	SL	TJ	TM	TN	TR	TT	TZ	UA	UG	US	UZ	VC	VN	YU
	ZA	ZM	ZW																			

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003086443	A1	WO 2003-US11405	20030410

PRIORITY APPLN. INFO: US 2002-372175P 20020411

INT. PATENT CLASSIF.:

MAIN: A61K035-78

SECONDARY: A61K031-70

BASIC ABSTRACT:

WO2003086443 A UPAB: 20031223

NOVELTY - A composition of particles comprising a **bioactive** material is prepared by:

(1) spraying a liquid formulation comprising the material to form droplets;

(2) freezing the droplets by immersion into a cold fluid; and

(3) drying the droplets to form powder particles, where an average physical size of the particles is 10 - 200 (preferably 20) micro m, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an apparatus for preparation of spray freeze-dried particles for intranasal administration comprising:

(1) the liquid formulation;

(2) nozzle for spraying the liquid formulation to form droplets;

(3) cold fluid into which the droplets are immersed to form frozen droplets (10 - 200 micro m); and

(4) a drying chamber for drying the frozen droplets to form particles having average aerodynamic size of 10 - 150 micro m.

ACTIVITY - Virucide.

No biological data given.

MECHANISM OF ACTION - Vaccine.

No biological data given.

USE - The composition of particles is used for preservation and intranasal administration of **bioactive** materials such as peptide, polypeptide, protein, nucleic acid, bacteria, antibody, cell, liposome, and virus (e.g. influenza virus, parainfluenza virus, human metapneumovirus, respiratory syncytial virus, corona virus family members, herpes simplex virus, severe acute respiratory syndrome (SARS) virus, cytomegalovirus, or Epstein-Barr virus) (claimed); for treating disorders associated with e.g. cold or flu.

ADVANTAGE - The composition exhibits improved stability and enhances shelf-life of sensitive biological materials in storage at temperature above freezing (e.g. at 25 deg. C for at least 1 year, or at 4 deg. C for more than 2 years) as the moisture content of the particles is 1 - 5 wt.%. Spray freeze-drying reduces heat stress by processing formulations in a cold environment and providing surface to volume ratio favorable to quick drying. The particles have an average aerodynamic size of 10 - 200 (preferably 20) micro m; an average physical diameter of 10 - 200 micro m, and a density of less than 0.9 (preferably 0.5 - 0.2) g/cc, hence the **bioactive** material can reach the alveolar sacs deep in the lungs.

Dwg.0/7

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB; DCN

MANUAL CODES: CPI: A12-V01; B04-B01B; B04-C01; B04-C02; B04-C03;  
B04-D01; B04-E01; B04-F01; B04-F10; B04-F11;  
B04-G01; B04-N02; B04-N04; B05-A01B; B05-B01B;  
B05-B01P; B05-B02C; B05-C01; B05-C03; B05-C04;  
B05-C08; B07-A02A; B07-A02B; B07-D09; B10-A03;  
B10-A07; B10-A09A; B10-A09B; B10-A22; B10-B02J;  
B10-C04E; B10-D03; B10-E04C; B10-E04D; B10-G02;  
B11-C05; B11-C09; B12-M09; B12-M11F; B12-M11G;  
B14-S11A; D05-H07; D05-H11

L79 ANSWER 30 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2003-636536 [60] WPIDS  
DOC. NO. CPI: C2003-173927

TITLE: Solid pharmaceutical composition for parenteral administration of e.g. analgesic, comprises coated inner **matrix** coated that disintegrates upon contact with animal tissue or tissue fluids.

DERWENT CLASS: A96 B07 D22

INVENTOR(S): BUCH-RASMUSSEN, T; HANSEN, H E; SABRA, M C; RASMUSSEN, T B

PATENT ASSIGNEE(S): (BUCH-I) BUCH-RASMUSSEN T; (HANS-I) HANSEN H E; (SABR-I) SABRA M C; (NOVO) NOVO NORDISK AS

COUNTRY COUNT: 102

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC																
WO 2003051328	A1	20030626	(200360)*	EN	51	A61K009-00																	
RW:	AT	BE	BG	CH	CY	CZ	DE	DK	EA	EE	ES	FI	FR	GB	GH	GM	GR	IE	IT	KE	LS	LU	
	MC	MW	MZ	NL	OA	PT	SD	SE	SI	SK	SL	SZ	TR	TZ	UG	ZM	ZW						
W:	AE	AG	AL	AM	AT	AU	AZ	BA	BB	BG	BR	BY	BZ	CA	CH	CN	CO	CR	CU	CZ	DE	DK	
	DM	DZ	EC	EE	ES	FI	GB	GD	GE	GH	GM	HR	HU	ID	IL	IN	IS	JP	KE	KG	KP	KR	
	KZ	LC	LK	LR	LS	LT	LU	LV	MA	MD	MG	MK	MN	MW	MX	MZ	NO	NZ	OM	PH	PL	PT	
	RO	RU	SC	SD	SE	SG	SK	SL	TJ	TM	TN	TR	TT	TZ	UA	UG	US	UZ	VC	VN	YU	ZA	
	ZM	ZW																					
US 2003161881	A1	20030828	(200363)													A61K009-22							

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003051328	A1	WO 2002-DK865	20021217
US 2003161881	A1	US 2001-342065P	20011219
	Provisional	US 2002-322143	20021218

PRIORITY APPLN. INFO: DK 2001-1901 20011218

INT. PATENT CLASSIF.:

MAIN: A61K009-00; A61K009-22

SECONDARY: A61K009-14; A61K009-36; A61K038-28; A61K047-14

BASIC ABSTRACT:

WO2003051328 A UPAB: 20030919

NOVELTY - A solid pharmaceutical composition comprises an inner **matrix** comprising therapeutic agent(s), and biodegradable and water-impermeable coating covering part of the surface of the composition. The inner **matrix** disintegrates upon contact with animal tissue or tissue fluids.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for manufacturing the above composition by coating a mold with a biodegradable polymer, melting and injecting an inner **matrix** comprising a therapeutic agent(s) into the mold, hardening the mold, and cutting the resulting rod into elongated compositions.

USE - For parenteral administration of therapeutic agents, e.g. analgesics, antianxiety drugs, antiarthritic drugs, **antibiotic** agents, anticholinergics, antidepressants, antidiabetics, antiemetics, antihistaminics, antihypertensive agents, antiinflammatory drugs, antimigraine agents, antiparkinsonism agents, antipasmodics, antipsychotics, antithrombotic agents, antiviral agents, appetite suppressants, blood factors, cardiovascular drugs, cerebral vasodilators, chemotherapeutic drugs, cholinergic agonists, contraceptives, coronary agents, diuretics, hormonal agents, immunosuppressive agents, growth factors, narcotic antagonists, opioids, peripheral vasodilators, tranquilizers, vaccines, immunogenic agents, or immunizing agents. The therapeutic agent also includes hormones, lipids, nucleic acids, nucleotides, oligonucleotides, oligosaccharides, organics, peptides, mimetics, antibodies, peptides, polysaccharides, or protein; or

coagulation factors such as FVII, and FVIII, GLP-1, EPO, TPO, interferon or their derivatives. It is for parenteral injection in an animal consisting of fish, birds, molluscs, reptiles, or mammals including human. It is used for immunization (all claimed).

ADVANTAGE - By providing a disintegratable and/or soluble inner **matrix**, the rate of release of the drug can be controlled, thus providing a more constant release rate. The whole composition is broken down completely in the tissue within short period than to the time required for release of the therapeutic agent. Surgery is not required to remove the composition after release of the therapeutic agent, and local irritation caused by the composition is a very limited. The composition can penetrate the epidermis or mucosa of a human being at a force of less 5 N without or with the use of trocar or syringe.

Dwg.0/9

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; DCN  
MANUAL CODES: CPI: A12-V01; B02-Z; B04-B01B; B04-B03B; B04-B03C;  
B04-C01; B04-C02; B04-C03; B04-D01; B04-E01;  
B04-G01; B04-H01; B04-H05; B04-H06; B04-H07;  
B04-H19; B04-J01; B04-J03; B04-N02; B04-N04;  
B05-B01P; B07-A02B; B10-A07; B10-C04E; B12-M05;  
B12-M10C; B14-A02; B14-C01; B14-C03; B14-C09;  
B14-E05; B14-E12; B14-F01; B14-F02B; B14-F02D;  
B14-F02D1; B14-F04; B14-G01; B14-G02; B14-G03;  
B14-J01A3; B14-J01B4; B14-J02A1; B14-J02B1;  
B14-J05D; B14-J07; B14-L06; B14-L09; B14-N16;  
B14-P01; B14-S11; D09-C04

L79 ANSWER 31 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2003-605712 [57] WPIDS  
CROSS REFERENCE: 1992-090052 [12]; 1993-312039 [40]  
DOC. NO. CPI: C2003-164834  
TITLE: Method of processing collagen based tissues e.g. skin and blood vessels for transplantation involves procuring and processing the tissue to remove cellular components.  
DERWENT CLASS: A96 B04 B05 D16 D22 E19  
INVENTOR(S): CAMPO, A A D; COLEMAN, C; GRIFFEY, E S; LIVESEY, S A;  
NAG, A; NICHOLS, K B  
PATENT ASSIGNEE(S): (LIFE-N) LIFECCELL CORP  
COUNTRY COUNT: 1  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
US 2003035843	A1	20030220	(200357)*		19	C12N005-08	

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2003035843	A1	CIP of	US 1990-581584 19900912
		CIP of	US 1991-709504 19910603
		CIP of	US 1992-835138 19920212
		CIP of	US 1993-4752 19930202
		Cont of	US 1994-227264 19940413
		Cont of	US 1996-759801 19961203
			US 2002-165790 20020607

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 2003035843	A1 CIP of	US 5336616



PRIORITY APPLN. INFO: US 1994-227264 19940413; US 1990-581584  
19900912; US 1991-709504 19910603; US  
1992-835138 19920212; US 1993-4752  
19930202; US 1996-759801 19961203; US  
2002-165790 20020607

## INT. PATENT CLASSIF.:

MAIN: C12N005-08

SECONDARY: A61K035-30; A61K035-32; A61K035-34; A61K035-44

## BASIC ABSTRACT:

US2003035843 A UPAB: 20030906

NOVELTY - A method of processing collagen based tissue comprising  
procuring and processing the tissue to remove cellular components, is new.USE - For processing collagen based tissue (e.g. skin, blood vessels,  
heart valves, ligaments, tendons, bone, cartilage, duramater, nerves and  
other similar tissues derived from one or more mammals) for  
transplantation (claimed) useful to generate a transplantable biological  
tissue graft.ADVANTAGE - The method combines both biochemical and physical  
processing steps to achieve the ideal features of template function such  
that the tissue graft can be remodeled for long-term maintenance by the  
host. The transplantable biological tissue graft generated by the process  
provides an extracellular protein and collagen **matrix**, which can  
be remodelled and repaired by the host, provides an intact basement  
membrane for secure reattachment of viable endothelial cells, does not  
elicit an immune response by the host, does not calcify, and can be stored  
and transported at ambient temperature.

Dwg.0/0

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB; DCN

MANUAL CODES: CPI: A03-C01; A12-V02; B01-D02; B04-C02; B04-C03;  
B04-F01; B04-L01; B04-N04; B05-A01B; B05-A03A;  
B05-B02A3; B05-C01; B05-C03; B05-C07; B05-C08;  
B06-A01; B06-A02; B06-D09; B06-E05; B07-A02A;  
B07-A02B; B07-D03; B07-D09; B07-D10; B07-D13;  
B07-F01; B09-D01; B10-A07; B10-A09A; B10-A10;  
B10-A13D; B10-A17; B10-B01B; B10-B02D; B10-B02J;  
B10-B03B; B10-C03; B10-D01; B10-D03; B10-E02;  
B10-E04C; B11-A; B11-B; B11-C08D; B11-C09; D05-A02;  
D05-H01; D05-H08; D05-H13; E06-H; E07-H; E09-D01;  
E10-A07; E10-A09B1; E10-A13B2; E10-A17B; E10-B01C1;  
E10-B02D1; E10-B02D6; E10-B02E; E10-B03B1; E10-C02A;  
E10-C03; E10-C04J2U; E10-D01D; E10-E02D5; E31-H05;  
E31-K05D; E32-A04

L79 ANSWER 32 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2002-479639 [51] WPIDS

DOC. NO. CPI: C2002-136479

TITLE: Vitricification of natural or engineered tissue or organ  
other than blood vessel involves immersing tissue in  
cryoprotectant solutions with increasing concentrations  
and cooling to below **glass** transition  
temperature.

DERWENT CLASS: A96 D22 E19 G04 J07

INVENTOR(S): BROCKBANK, K G M; KHIRABADI, B S; SONG, Y C

PATENT ASSIGNEE(S): (ORGA-N) ORGAN RECOVERY SYSTEMS; (ORGA-N) ORGAN RECOVERY  
SYSTEMS INC

COUNTRY COUNT: 95

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2002032225	A2	20020425	(200251)*	EN	32	A01N001-02	

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ  
 NL OA PT SD SE SL SZ TR TZ UG ZW  
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK  
 DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
 LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD  
 SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
 AU 2002011792 A 20020429 (200255) A01N001-02  
 EP 1326492 A2 20030716 (200347) EN A01N001-02  
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
 RO SE SI TR

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002032225	A2	WO 2001-US32415	20011018
AU 2002011792	A	AU 2002-11792	20011018
EP 1326492	A2	EP 2001-979871	20011018
		WO 2001-US32415	20011018

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002011792	A Based on	WO 2002032225
EP 1326492	A2 Based on	WO 2002032225

PRIORITY APPLN. INFO: US 2000-691197 20001019

INT. PATENT CLASSIF.:

MAIN: A01N001-02

## BASIC ABSTRACT:

WO 200232225 A UPAB: 20020812

NOVELTY - A natural or engineered tissue or organ other than a blood vessel is vitrified by:

(i) immersing it in a series of solutions having increasing concentrations of cryoprotectant to achieve a cryoprotectant concentration for vitrification;

(ii) rapidly cooling to between -80 deg. C and the **glass** transition temperature (Tg); and

(iii) further cooling to below Tg.

DETAILED DESCRIPTION - Vitrification of a natural or engineered tissue or organ other than a blood vessel comprises:

(i) immersing the tissue (3) or organ in a series of solutions having increasing concentrations of cryoprotectant and each having a temperature above -15 deg. C;

(ii) cooling the tissue of organ at 2.5-100 deg. C per minute from a temperature above -15 deg. C to between -80 deg. C and the Tg; and

(iii) further cooling at average rate less than 30 deg. C per minute from between -80 deg. C and the Tg to below the Tg to vitrify the tissue or organ.

An INDEPENDENT CLAIM is also included for a method for removing a tissue or organ other than a blood from vitrification in a solution containing cryoprotectant by:

(a) warming the vitrified tissue or organ in a solution containing cryoprotectant at an average rate of 20-40 deg. C per minute to between -80 deg. C and the Tg;

(b) further warming in the solution at an average rate of 200-300 deg. C per minute to a temperature above -75 deg. C; and

(c) immersing the tissue or organ in a series of solutions having decreasing concentrations of cryoprotectant.

USE - For vitrifying a natural or engineered tissue or organ other than a blood vessel, particularly musculoskeletal tissue, cartilage, menisci, muscles, ligaments, tendons, skin, cardiovascular tissue, heart

valves, myocardium, periodontal tissue, glandular tissue, islets of Lange, cornea, ureter, urethra, pancreas, bladder, kidney, breast, liver, intestine or heart.

ADVANTAGE - The vitrification method results in a greater number or percentage of viable cells in a tissue or organ sample, compared to conventional cryopreservation techniques. It results in tissue or organ samples having at least 50% viable cells.

DESCRIPTION OF DRAWING(S) - The figure shows a perfusion system that can be used in the invention.

Tissue 3

Dwg.1/4

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; GI; DCN  
MANUAL CODES: CPI: A12-V; A12-V02; D09-A; E05-G09D; E07-A02A; E07-A02D;  
E07-A02H; E07-D03; E07-D04A; E10-A07; E10-A10A;  
E10-A13B2; E10-A22E; E10-B02D4; E10-B02D6;  
E10-C04J2U; E10-D03C1; E10-D03C3; E10-E02E1;  
E10-E04G; E10-E04H; E10-E04J; E10-E04L1; E10-E04L2;  
E10-E04M4; E10-H04C4; E31-H05; E33-B; E33-C; E33-E;  
E34-B03; G04-B; G04-B01; J07-D

L79 ANSWER 33 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2001-502406 [55] WPIDS  
CROSS REFERENCE: 2001-514226 [56]  
DOC. NO. NON-CPI: N2001-372640  
DOC. NO. CPI: C2001-151043  
TITLE: Hybrid composition used for e.g. bone repair, comprises water-based liquid component comprising cationic polymers and mono-phosphate salt, and powder component comprising calcium phosphate sources.  
DERWENT CLASS: A96 B07 D22 E19 P34  
INVENTOR(S): CHAPUT, C; CHENITE, A  
PATENT ASSIGNEE(S): (BIOS-N) BIO SYNTech CANADA INC; (BIOS-N) BIOSYNTECH CANADA INC; (CHAP-I) CHAPUT C; (CHEN-I) CHENITE A  
COUNTRY COUNT: 95  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2001041822	A1	20010614	(200155)*	EN	80	A61L024-00	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ							
NL OA PT SD SE SL SZ TR TZ UG ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM							
DZ EE ES FI GB GD GE GH GR HU ID IL IN IS JP KE KG KP KR KZ LC							
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE							
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW							
AU 2001019792	A	20010618	(200161)			A61L024-00	
EP 1255576	A1	20021113	(200282)	EN		A61L024-00	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT							
RO SE SI TR							
EP 1255576	B1	20030820	(200356)	EN		A61L024-00	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR							
US 2003158302	A1	20030821	(200356)			C08K005-49	
DE 60004710	E	20030925	(200371)			A61L024-00	

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001041822	A1	WO 2000-CA1492	20001208
AU 2001019792	A	AU 2001-19792	20001208
EP 1255576	A1	EP 2000-982802	20001208
		WO 2000-CA1492	20001208

EP 1255576	B1	EP 2000-982802	20001208
		WO 2000-CA1492	20001208
US 2003158302	A1	WO 2000-CA1492	20001208
		US 2002-149053	20021203
DE 60004710	E	DE 2000-604710	20001208
		EP 2000-982802	20001208
		WO 2000-CA1492	20001208

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001019792	A	WO 2001041822
EP 1255576	A1	WO 2001041822
EP 1255576	B1	WO 2001041822
DE 60004710	E	EP 1255576
	Based on	WO 2001041822

PRIORITY APPLN. INFO: US 1999-169954P 19991209

## INT. PATENT CLASSIF.:

MAIN: A61L024-00; C08K005-49  
SECONDARY: A61K009-00; A61K047-36; A61L024-08; A61L027-20;  
A61L027-24; A61L027-32; A61L027-52; C08K003-10;  
C08K003-26; C08K003-32; C08L005-08

## BASIC ABSTRACT:

WO 200141822 A UPAB: 20031105

NOVELTY - Hybrid composition (A) comprises:

- (1) a water-based, thermo-gelling liquid comprising at least one water soluble cationic polymer, organic monophosphate source and optionally one water soluble organic monosulfonate, monosulfate or monocarboxylate source, and
- (2) a solid component having calcium, fluoride, strontium, carbonate, and/or phosphate salt.

The composition gels at body temperature.

DETAILED DESCRIPTION - In situ self forming mineral polymer hybrid composition (A) comprises:

- (1) a water-based, thermo-gelling liquid comprising at least one water soluble cationic polymer, organic monophosphate source and optionally one water soluble organic monosulfonate, monosulfate or monocarboxylate source, and having a pH of 6.5-7.4; and
- (2) a solid component having calcium, fluoride, strontium, carbonate, and/or phosphate salt.

The composition gels at body temperature.

An INDEPENDENT CLAIM is also included for the preparation of (A) which comprises:

- (a) preparing a first water-based liquid sub-component comprising hydrosoluble cationic polymer and at least 0.5% w/v chitosan, where the first sub-component is stable at below 10 deg. C;
- (b) preparing a second water-based liquid sub-component comprising at least one organic monophosphate source, and optionally a water-soluble organic monosulfonate, monosulfate, or monocarboxylate source;
- (c) preparing the solid component;
- (d) homogeneously mixing the second liquid sub-component and the solid component to form a dispersion that is stable at room temperature or below, and
- (e) mixing the first liquid sub-component with the dispersion.

ACTIVITY - Osteopathic.

MECHANISM OF ACTION - None given.

USE - The composition is used for repair, regeneration, filling, and replacement of mammalian or human hard tissues e.g. bone, dentine, and enamel (claimed); as well as delivering drugs or bioreactive reagents to these tissues. Particularly, the composition can be injected into a defect, cavity, or interface of a body tissue e.g. a cancellous, cortical,

or corticocancellous bone or hyaline or fibro-cartilage tissue (claimed). It may also be injected to the metaphysis or diaphysis of a bone or fractured bone (claimed). The composition is also used to retain orthopedic devices e.g. pin, prosthesis, and biodegradable fixation. It may also be used in orthopedic, plastic, cranio-maxillofacial, or dental surgery (claimed). It is also used in solitary bone lesions such as those observed in osteomyelitis, round cell lesions, fibrous displasia, bone cyst, chondromyxoid fibroma, osteosarcoma, non-ossifying sarcoma, endochondroma, chondroblastoma, and joint revision osteolysis. It is further applied at the interface with prosthesis or implant such as prosthetic joint (hip or knee) or a screw (pedicular).

ADVANTAGE - The composition forms a consistent gel-looking material at 37 deg. C and 100% humidity. It can be remolded in situ and is resorbable.

Dwg.0/17

FILE SEGMENT: CPI GMPI  
FIELD AVAILABILITY: AB; DCN  
MANUAL CODES: CPI: A12-V02; B04-C02A; B04-C02E3; B04-C03A; B04-H06A;  
B04-J01; B04-N02; B05-A01A; B05-A01B; B05-A03;  
B05-B01P; B05-C04; B05-C05; B07-A02B; B07-D11;  
B10-A07; B10-A09A; B10-B03B; B10-E04C; B11-C04A;  
B14-N01; D09-C01D; E05-B01; E05-G; E10-A07;  
E10-C04J2; E10-C04L1; E31-K05B; E31-K05C; E33-D;  
E34-B02; E34-D03; E35-C; E35-K04

L79 ANSWER 34 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2001-006946 [01] WPIDS  
DOC. NO. CPI: C2001-001620  
TITLE: Solid pharmaceutical compositions for parenteral  
injection, comprising a binder and therapeutic agent(s)  
e.g. insulin, can be injected without cannulae and are  
stable long-term, solid and moldable.  
DERWENT CLASS: B07  
INVENTOR(S): AASMUL, S; BUCH-RASMUSSEN, T; FLINK, J M; HANSEN, P;  
JUUL-MORTENSEN, C; POULSEN, J  
PATENT ASSIGNEE(S): (NOVO) NOVO NORDISK AS  
COUNTRY COUNT: 93  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2000062759	A1	20001026	(200101)*	EN	40	A61K009-14	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL							
OA PT SD SE SL SZ TZ UG ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ							
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK							
LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI							
SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW							
AU 2000039574	A	20001102	(200107)				
EP 1173151	A1	20020123	(200214)	EN		A61K009-14	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT							
RO SE SI							
JP 2002542183	W	20021210	(200301)		51	A61K009-14	
EP 1173151	B1	20030709	(200353)	EN		A61K009-14	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE							
DE 60003803	E	20030814	(200361)			A61K009-14	

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000062759	A1	WO 2000-DK184	20000413
AU 2000039574	A	AU 2000-39574	20000413

EP 1173151	A1	EP 2000-918719	20000413
JP 2002542183	W	WO 2000-DK184	20000413
		JP 2000-611896	20000413
		WO 2000-DK184	20000413
EP 1173151	B1	EP 2000-918719	20000413
		WO 2000-DK184	20000413
DE 60003803	E	DE 2000-603803	20000413
		EP 2000-918719	20000413
		WO 2000-DK184	20000413

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000039574	A	Based on
EP 1173151	A1	Based on
JP 2002542183	W	Based on
EP 1173151	B1	Based on
DE 60003803	E	Based on
		Based on

PRIORITY APPLN. INFO: DK 1999-514 19990416

## INT. PATENT CLASSIF.:

MAIN: A61K009-14  
 SECONDARY: A61J003-02; A61K038-00; A61K038-28; A61K047-10;  
 A61K047-26; A61M005-142; A61P005-50

## BASIC ABSTRACT:

WO 200062759 A UPAB: 20001230

NOVELTY - Solid pharmaceutical compositions for parenteral injection comprising a binder and at least one therapeutic agent consisting of at least one dosage, are new.

DETAILED DESCRIPTION - New pharmaceutical compositions for parenteral injection comprises a binder that constitutes at least 0.5 weight % of the composition. The composition comprises at least one binding agent that is a carbohydrate and optionally at least one non-crystallization agent, and forms an amorphous **matrix**.

INDEPENDENT CLAIMS are also included for the following:

(1) methods for preparing solid pharmaceutical compositions for parenteral injection; and

(2) devices containing the above-described solid pharmaceutical compositions adapted for injection through the epidermis or mucosa.

ACTIVITY - Analgesic; tranquilizer; antiarthritics; antibacterial; antidepressant; antidiabetics; antiemetic; hypotensive; antiinflammatory; antimigraine; antiparkinsonian; thrombolytic; antiviral; anorectic; cardiant; vasodilator; contraceptive; diuretic; hormonal; immunosuppressant; immunomodulator. No biological data is given.

MECHANISM OF ACTION - Vaccine; narcotic antagonist.

USE - The parenteral injection compositions are used to administer analgesics, anxiolytics, anti-arthritis, **antibiotics**, anticholinergics, antidepressants, antidiabetics, anti-emetics, antihistaminics, antihypertensives, anti-inflammatory, antimigraine agents, antiparkinsonism agents, antipasmodesics, antipsychotics, antithrombotics, antivirals, appetite suppressants, blood factors, cardiovascular drugs, cerebral vasodilators, chemotherapeutics, cholinergic agonists, contraceptives, coronary agents, diuretics, hormonal agents, immunosuppressants, growth factors, narcotic antagonists, opioids, peripheral vasodilators, tranquilizers, vaccines, immunogenic agents, immunizing agents, hormones, lipids, nucleic acids, nucleotides, oligonucleotides, oligosaccharides, organics, peptidomimetics, antibodies, peptides, polysaccharides, proteins, peptides, polypeptides, growth factors or blood factor, particularly insulin, glucagon, growth hormone, growth factors such as FVII or FVIII, GLP-1, erythropoietin, thrombopoietin, interferon or their derivatives (claimed). They may be

used for immunization (claimed).

ADVANTAGE - The compositions can be injected without the use of cannulae. They are long-term stable, solid and moldable. They have sufficient strength for parenteral injection but have a large content of therapeutic agent. They are particularly suitable for patients requiring frequent medication. They can be administered using epidermal or mucosal injection devices that provide easy, rapid and essentially painless injection. The avoidance of needles eliminates one source for cross-contamination in hospitals. They are stable long-term, even at ambient temperature and do not require special storage conditions. They are stable at ambient temperature in terms of compressive strength, the glassy nature of the binder and the geometry.

Dwg.0/0

FILE SEGMENT: CPI  
 FIELD AVAILABILITY: AB; DCN  
 MANUAL CODES: CPI: B04-B01B; B04-B03B; B04-B04D2; B04-D01; B04-E01;  
 B04-G01; B04-H05; B04-H06; B04-H07; B04-H19;  
 B04-J01; B04-J03A; B04-J03B; B04-J05; B04-N04;  
 B11-B; B11-C04; B14-A01; B14-A02; B14-C01; B14-C03;  
 B14-C09; B14-D01; B14-E05; B14-E12; B14-F01;  
 B14-F02; B14-F02B; B14-F02D; B14-F02D1; B14-F04;  
 B14-G02; B14-G03; B14-J01A3; B14-J01B3; B14-J01B4;  
 B14-L01; B14-L06; B14-L09; B14-N08; B14-P01;  
 B14-S04; B14-S11

L79 ANSWER 35 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 2000-482716 [42] WPIDS  
 DOC. NO. CPI: C2000-145245  
 TITLE: Barrier method for preserving biological solutions or  
 suspensions by vitrification.  
 DERWENT CLASS: B04 C07 D16 D22  
 INVENTOR(S): BRACKEN, K R; BRONSHTEIN, V; LIVERS, R K; WILLIAMS, D R  
 PATENT ASSIGNEE(S): (UVPN-N) UNIVERSAL PRESERVATION TECHNOLOGIES INC  
 COUNTRY COUNT: 91  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2000040696	A1	20000713	(200042)*	EN	28	C12N001-04	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL							
OA PT SD SE SL SZ TZ UG ZW							
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES							
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS							
LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL							
TJ TM TR TT TZ UA UG UZ VN YU ZA ZW							
AU 2000024895	A	20000724	(200052)			C12N001-04	
US 6306345	B1	20011023	(200165)			B01J019-00	
EP 1141232	A1	20011010	(200167)	EN		C12N001-04	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL RO							
SI							
JP 2002534079	W	20021015	(200282)		40	C12N001-00	

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000040696	A1	WO 2000-US142	20000105
AU 2000024895	A	AU 2000-24895	20000105
US 6306345	B1	Provisional	US 1998-84451P
		Provisional	US 1999-114774P
		Provisional	US 1999-114775P
			US 1999-306137
EP 1141232	A1	EP 2000-903099	20000105

JP 2002534079 W

WO 2000-US142 20000105  
JP 2000-592394 20000105  
WO 2000-US142 20000105

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000024895	A Based on	WO 2000040696
EP 1141232	A1 Based on	WO 2000040696
JP 2002534079	W Based on	WO 2000040696

PRIORITY APPLN. INFO: US 1999-306137 19990506; US 1999-114774P  
19990105; US 1999-114775P 19990105; US  
1998-84451P 19980506

## INT. PATENT CLASSIF.:

MAIN: B01J019-00; C12N001-00; C12N001-04  
SECONDARY: A61G010-02; A61J003-00; A61J003-02; B01B001-00;  
C12M001-00; C12M001-33; C12N009-00

## BASIC ABSTRACT:

WO 200040696 A UPAB: 20000905

NOVELTY - A barrier method for preserving a biological solution or suspension as a powder, comprising: (a) drying the biological solution or suspension in a chamber by boiling under vacuum at a temperature in a range of -15 to 70 deg. C to form a mechanically-stable foam; and (b) crushing the mechanically-stable foam to form a powder.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a barrier method for preparing a powdered formulation of preserved biological materials, comprising: (a) drying at least two solutions or suspensions containing a biological material by boiling under vacuum to form at least two mechanically-stable foams; crushing the mechanically-stable foams to form at least two powders; and (b) mixing the powders containing the biological materials to form a powdered formulation, wherein the biological materials are barrier-protected against exposure to an outside environment throughout the drying, crushing and mixing steps; and

(2) an integrated apparatus for drying and crushing a biological solution or suspension, comprising a chamber having a heater and a cooler and a thermostat for regulating chamber temperature, a vacuum pump and a pressure-release valve for regulating chamber pressure, and a means for crushing a mechanically-stable porous foam.

USE - The method may be used to preserve biological solutions and suspensions containing peptides, proteins, antibodies, (co)enzymes, vitamins, serums, vaccines, viruses, liposomes, cells and some multicellular specimens.

Dwg.0/2

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; DCN  
MANUAL CODES: CPI: B03-L; B04-B04D4; B04-F01; B04-F11; B04-G01;  
B04-L01; B04-N04; B12-M11F; C03-L; C04-B04D4;  
C04-F01; C04-F11; C04-G01; C04-L01; C04-N04;  
C12-M11F; D05-A02A; D05-A02C; D05-H07; D05-H08;  
D05-H11; D09-A02

L79 ANSWER 36 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2000-039497 [03] WPIDS  
CROSS REFERENCE: 1998-032238 [03]; 1998-110384 [10]  
DOC. NO. CPI: C2000-010346  
TITLE: Preserving biological samples such as viruses, cells and small multicellular specimens.  
DERWENT CLASS: B04 D16 D22  
INVENTOR(S): BRONSHTEIN, V  
PATENT ASSIGNEE(S): (UVP-R-N) UNIVERSAL PRESERVATION TECHNOLOGIES INC



COUNTRY COUNT: 2  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
ZA 9810789	A	19990929	(200003)*		21	C12N000-00	
US 6509146	B1	20030121	(200309)			A01N001-00	

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
ZA 9810789	A	ZA 1998-10789	19981125
US 6509146	B1	US 1996-18573P	19960529
	Provisional	US 1996-21796P	19960715
	CIP of	US 1997-785472	19970117
	CIP of	US 1997-785473	19970117
		US 1997-979458	19971126

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 6509146	B1 CIP of	US 5766520

PRIORITY APPLN. INFO: US 1997-979458 19971126; US 1996-18573P  
19960529; US 1996-21796P 19960715; US  
1997-785472 19970117; US 1997-785473 19970117

## INT. PATENT CLASSIF.:

MAIN: A01N001-00; C12N000-00

SECONDARY: A01N001-02; A61K000-00; C12Q000-00

## BASIC ABSTRACT:

ZA 9810789 A UPAB: 20030206

NOVELTY - Preserving a biological sample comprises drying the sample by boiling under a vacuum at -15 to 70 deg. C to form a mechanically stable foam which will not collapse for at least 1 hour at -20 deg. C under vacuum.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) a method of preserving a biological sample comprising:
  - (i) primary drying of the sample by boiling under a vacuum at -15 to 70 deg. C to form a mechanically stable foam; and
  - (ii) secondary drying of the foam for at least 12 hours under vacuum at 0 to 100 deg. C (the drying temperature is greater than the selected storage temperature within a range of 0 to 70 deg. C);
- (2) a method of preserving a biological sample comprising:
  - (i) primary drying of the sample by boiling under a vacuum at -15 to 70 deg. C to form a mechanically stable foam;
  - (ii) secondary drying of the foam under vacuum at 0 to 100 deg. C for a period of time sufficient to increase the **glass** transition temperature of the material to a point above a selected storage temperature within a range of 0 to 70 deg. C; and
  - (iii) cooling the material to a temperature less than or equal to the selected storage temperature;
- (3) a foam comprising a biologically active material and a **polyol** protectant, in which the foam is a mechanically stable porous structure comprising a thin amorphous film, which will not collapse for at least 1 hour when stored at -20 deg. C under vacuum; and
- (4) a composition of protected biologically active material in the **vitreous** state, produced by:
  - (i) primary drying of a biologically active material by boiling under a vacuum to form a mechanically stable foam;
  - (ii) secondary drying of the foam for a period of time sufficient to

increase the **glass** transition temperature of the material to a point above a selected storage temperature within the range of 0-70 deg. C; and

(iii) cooling the material to a temperature of less than or equal to the storage temperature.

USE - The methods can be used for preserving solutions and suspensions containing biologically active molecules, viruses (e.g. vaccines), cells and small multicellular specimens. The methods can be used for long-term storage of these labile biological materials at ambient temperatures in dehydrated, very viscous amorphous liquid or **glass** state. The preservation and storage of these materials is important for food and microbiological industries, agriculture, medical and research purposes.

ADVANTAGE - The methods provide long-term storage of labile biological materials at ambient temperatures. Dehydrated reagents, materials and cells have reduced weight and require reduced space for storage and increased stability.

Dwg.0/6

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; DCN  
MANUAL CODES: CPI: B04-B04L; B04-B04M; B04-C01; B04-C02; B04-C03;  
B04-F01; B11-B; B11-C06; B11-C08E1; B11-C09;  
B12-M06; D05-A01C; D05-A03A; D05-H01; D05-H07;  
D05-H08; D05-H10; D05-H13; D09-C

L79 ANSWER 37 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 1999-105991 [09] WPIDS  
DOC. NO. CPI: C1999-031695  
TITLE: New **modified glycoside(s)** having good  
solvent properties - useful, e.g. in solid delivery  
systems for dissolution, encapsulation, storage and  
delivering therapeutic molecules.  
DERWENT CLASS: A60 B07 C07 D16 D25 E13 G02  
INVENTOR(S): COLACO, C  
PATENT ASSIGNEE(S): (QUAD-N) QUADRANT HOLDINGS CAMBRIDGE LTD; (ELAN-N) ELAN  
DRUG DELIVERY LTD; (COLA-I) COLACO C  
COUNTRY COUNT: 84  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 9901463	A2	19990114	(199909)*	EN	37	C07H000-00	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW							
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW							
AU 9882299	A	19990125	(199923)			C07H000-00	
EP 994887	A2	20000426	(200025)	EN		C07H001-00	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE							
US 2002009464	A1	20020124	(200210)			A61K038-43	
JP 2002510316	W	20020402	(200225)		34	C07H015-04	
EP 994887	B1	20021127	(200279)	EN		C07H001-00	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE							
DE 69809746	E	20030109	(200312)			C07H001-00	
ES 2187038	T3	20030516	(200337)			C07H001-00	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9901463	A2	WO 1998-GB1962	19980703

AU 9882299	A	AU 1998-82299	19980703
EP 994887	A2	EP 1998-932361	19980703
		WO 1998-GB1962	19980703
US 2002009464	A1 Provisional	US 1997-51727P	19970703
	Cont of	WO 1998-GB1962	19980703
	Cont of	US 1998-111925	19980708
JP 2002510316	W	US 2001-923023	20010806
		WO 1998-GB1962	19980703
EP 994887	B1	JP 1999-506677	19980703
		EP 1998-932361	19980703
DE 69809746	E	WO 1998-GB1962	19980703
		DE 1998-609746	19980703
		EP 1998-932361	19980703
		WO 1998-GB1962	19980703
ES 2187038	T3	EP 1998-932361	19980703

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9882299	A Based on	WO 9901463
EP 994887	A2 Based on	WO 9901463
JP 2002510316	W Based on	WO 9901463
EP 994887	B1 Based on	WO 9901463
DE 69809746	E Based on	EP 994887
	Based on	WO 9901463
ES 2187038	T3 Based on	EP 994887

PRIORITY APPLN. INFO: US 1997-51727P 19970703; US 1998-111925  
19980708; US 2001-923023 20010806

## INT. PATENT CLASSIF.:

MAIN: A61K038-43; C07H000-00; C07H001-00; C07H015-04  
SECONDARY: A61K009-00; A61K009-02; A61K009-14; A61K009-20;  
A61K009-50; A61K009-70; A61K031-7032; A61K031-7105;  
A61K031-711; A61K038-00; A61K039-00; A61K039-12;  
A61K039-39; A61K045-00; A61K047-26; C07H003-00;  
G02B005-22

## BASIC ABSTRACT:

WO 9901463 A UPAB: 19990310

**Modified glycosides** of formula (I) are new: (Y)<sub>n</sub>X (I)  
Y = a **saccharide** subunit; n = 1-6; each of the n  
**saccharide** subunits are linked in a linear or branched chain by  
one or more glycosidic linkages, and X = 5-6C carbon  
**monosaccharide polyalcohol** in which a hydroxy group of  
the **polyalcohol** is linked via a glycosidic bond to the anomeric  
carbon of one of the **saccharide** subunits, and at least a portion  
of the hydroxy groups of the glycoside is derivatised in the form of an  
ester, mixed ester, ether or mixed ether. Also claimed are: (1) a  
composition comprising (I) and a substance (II) capable of being released  
from the composition; (2) an optically clear device comprising (I); (3) an  
optically clear coating on a surface comprising plastic or metal, where  
the coating comprises (I); and (4) preparation of a **vitreous**  
solid delivery system comprising: (a) forming (I); and (b) processing (I)  
and (II) to be released from (I) to give a **vitreous**  
**glass matrix** having (II) incorporated in it.

USE - (I) may be used to form solid delivery systems useful for the  
dissolution, encapsulation, storage and delivery of a variety of  
therapeutic molecules. Solid delivery systems may be used for controlled  
release of labile molecules, particularly **bioactive** materials  
such as organic pharmaceutical compounds, enzymes, vaccines and biological  
control agents such as pesticides and pheromones. The delivery systems may  
also be used for delivering steroid hormones, peptides, peptide mimetics,  
**antibiotics**, corticosteroids, bronchodilators, immunomodulators,

immunosuppressants or substances added to laundry detergents. The optically clear nature of the compositions renders them suitable for use as a vehicle for colouring or coating a wide variety of materials such as plastics, metals and glasses. (I) also have excellent solvent properties for the dissolution of a number of poorly water soluble intense dyes.

ADVANTAGE - (I) are low cost, biodegradable, can be synthesised easily, and have good solvent properties for organic and inorganic compounds (e.g. mixed transition metal oxides and metal alkoxides). Significant intensification of colour is obtained with dye solutions containing (I) which allows minimal quantities of expensive photoactive materials to be used. Dye compositions containing (I) remain clear at ambient temperature and humidity due to their extremely slow rates of devitrification. Glasses formed using (I) have melt temperatures suitable for the incorporation of e.g. biologically active compounds without thermal degradation, and have Tgs (**glass** transition temperatures) above ambient temperatures. **Glass** melts of (I) are stable and allow suspension of core particles without alteration of their physical nature (e.g. during coating of micron-sized particles e.g. non-hygroscopic powders containing hygroscopic actives for by-inhalation administration of therapeutic agents).

Dwg.0/0

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; DCN  
MANUAL CODES: CPI: A12-V01; B04-C02; C04-C02; B07-A02B; C07-A02B;  
B10-E04C; C10-E04C; D05-A01A1; D05-A01A4; D05-C08;  
D05-H10; D11-A03B; E07-A02; G02-A05

FILE 'HOME' ENTERED AT 11:23:45 ON 21 JAN 2004

=> fil reg; d stat que l84; fil capl; d que nos l87; fil uspatfull; d que nos l94  
FILE 'REGISTRY' ENTERED AT 11:55:13 ON 21 JAN 2004  
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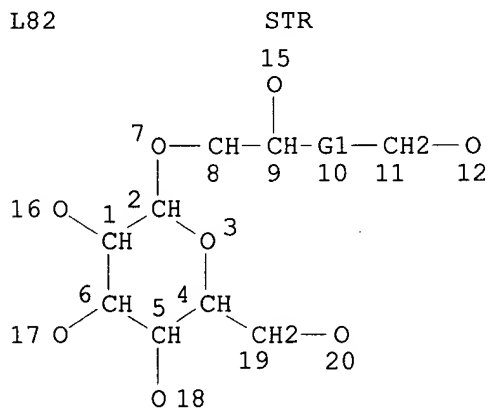
STRUCTURE FILE UPDATES: 20 JAN 2004 HIGHEST RN 639777-15-4  
DICTIONARY FILE UPDATES: 20 JAN 2004 HIGHEST RN 639777-15-4

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information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>



*structure  
search*

CH—O  
@13 14

REP G1=(1-3) 13  
NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE  
L84 2949 SEA FILE=REGISTRY SSS FUL L82

100.0% PROCESSED 16530 ITERATIONS  
SEARCH TIME: 00.00.01

2949 ANSWERS

FILE 'CAPLUS' ENTERED AT 11:55:13 ON 21 JAN 2004  
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FILE COVERS 1907 - 21 Jan 2004 VOL 140 ISS 4  
FILE LAST UPDATED: 20 Jan 2004 (20040120/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

L11 384955 SEA FILE=CAPLUS ABB=ON GLASS/OBI  
L82 STR  
L84 2949 SEA FILE=REGISTRY SSS FUL L82  
L85 5936 SEA FILE=CAPLUS ABB=ON L84  
L86 755 SEA FILE=CAPLUS ABB=ON L85(L) (DEV OR THU OR PAC OR PKT OR DMA  
OR BAC)/RL  
L87 15 SEA FILE=CAPLUS ABB=ON L11 AND L86

FILE 'USPATFULL' ENTERED AT 11:55:14 ON 21 JAN 2004  
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 20 Jan 2004 (20040120/PD)  
FILE LAST UPDATED: 20 Jan 2004 (20040120/ED)  
HIGHEST GRANTED PATENT NUMBER: US6681398  
HIGHEST APPLICATION PUBLICATION NUMBER: US2004010831  
CA INDEXING IS CURRENT THROUGH 20 Jan 2004 (20040120/UPCA)  
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 20 Jan 2004 (20040120/PD)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2003  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2003

>>> USPAT2 is now available. USPATFULL contains full text of the <<<  
>>> original, i.e., the earliest published granted patents or <<<  
>>> applications. USPAT2 contains full text of the latest US <<<  
>>> publications, starting in 2001, for the inventions covered in <<<  
>>> USPATFULL. A USPATFULL record contains not only the original <<<  
>>> published document but also a list of any subsequent <<<  
>>> publications. The publication number, patent kind code, and <<<  
>>> publication date for all the US publications for an invention <<<  
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<  
>>> records and may be searched in standard search fields, e.g., /PN, <<<  
>>> /PK, etc. <<<

>>> USPATFULL and USPAT2 can be accessed and searched together <<<  
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<

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>>> enter this cluster. <<<
>>> <<<
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<
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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que nos 191

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L82 STR
L84 2949 SEA FILE=REGISTRY SSS FUL L82
L88 172 SEA FILE=REGISTRY ABB=ON L84 AND USPATFULL/LC
L89 738 SEA FILE=USPATFULL ABB=ON L88
L90 28984 SEA FILE=USPATFULL ABB=ON GLASS/IT
L91 11 SEA FILE=USPATFULL ABB=ON L89 AND L90
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=> dup rem 187,191

FILE 'CAPLUS' ENTERED AT 12:10:17 ON 21 JAN 2004  
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FILE 'USPATFULL' ENTERED AT 12:10:17 ON 21 JAN 2004  
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)  
PROCESSING COMPLETED FOR L87  
PROCESSING COMPLETED FOR L91  
L96 26 DUP REM L87 L91 (0 DUPLICATES REMOVED)  
ANSWERS '1-15' FROM FILE CAPLUS  
ANSWERS '16-26' FROM FILE USPATFULL

=> d ibib abs hitstr 1-26; fil home

L96 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2003:491015 CAPLUS  
DOCUMENT NUMBER: 139:57936  
TITLE: Solid pharmaceutical for parenteral administration  
INVENTOR(S): Hansen, Henrik Egesborg; Sabra, Mads Christian;  
Rasmussen, Thomas Buch  
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.  
SOURCE: PCT Int. Appl., 51 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003051328	A1	20030626	WO 2002-DK865	20021217
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,			

MR, NE, SN, TD, TG

US 2003161881 A1 20030828  
PRIORITY APPLN. INFO.:US 2002-322143 20021218  
DK 2001-1901 A 20011218  
US 2001-342065P P 20011219

AB A solid pharmaceutical compn. for parenteral administration comprises an inner matrix contg. at least 1 therapeutic agent, and a biodegradable, and water-impermeable coating covering part of the surface of the compn., wherein the inner matrix disintegrates upon contact with animal tissue or tissue fluids. The coating is made from a material selected from the group consisting of polyesters such as polyglycolides, polylactides and polylactic polyglycolic acid copolymers, etc. The inner-matrix may comprise a binder, e.g., mannitol, and the active agent may comprise insulin. Dry amorphous Maltidex H16323 (35 g) was mixed with 35 g human insulin. The mixt. was cooled and investigated under a microscope and there was no air entrapment, which also is indicated by the const. torque. The insulin activity before mixing was 99.62% and after mixing 97.52%.

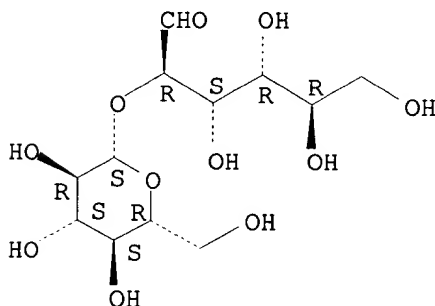
IT 534-46-3, Sophorose 547-25-1, Turanose 585-88-6  
, Maltitol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(solid pharmaceutical for parenteral administration)

RN 534-46-3 CAPLUS

CN D-Glucose, 2-O-.beta.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

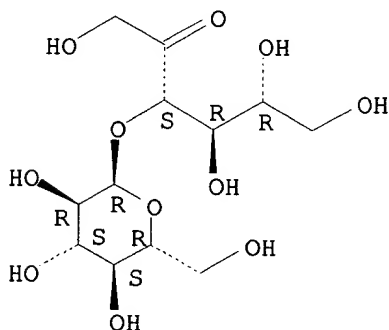
Absolute stereochemistry.



RN 547-25-1 CAPLUS

CN D-Fructose, 3-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

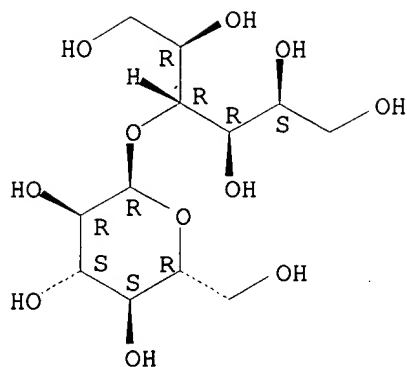


RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:335248 CAPLUS

DOCUMENT NUMBER: 138:358394

TITLE: Plasticized hydrophilic glasses for improved stabilization of biological agents

INVENTOR(S): Cicerone, Marcus T.; Tellington, Andrew; Trost, Landon; Sokolov, Alexei

PATENT ASSIGNEE(S): Brigham Young University, USA

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003035827	A2	20030501	WO 2002-US28320	20020906
WO 2003035827	A3	20031211		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-317881P P 20010907

US 2002-199061 A 20020722

AB The stabilization of biomaterials such as proteins in a nominally dry, hydrophilic glassy matrix is vastly improved by the addn. of an appropriate amt. of a small-mol. plasticizer such as a glycol or DMSO to the formulation, while maintaining a glass transition temp. (T<sub>g</sub>) that is above the storage temp. By plasticizing the glasses, their ability to preserve proteins is improved by as much as 100 times over the unplasticized glass at room temp. The plasticizer confers the greatest beneficial effect when it is dynamically coupled into the bulk glass, and this coupling occurs over a fairly narrow range of plasticizer concn. Methods are described in which a small-mol. plasticizer can be incorporated into a glass made of much larger mols. (e.g., a polymeric glass), with desired dynamic coupling, via a mol. that is believed to act

as a dynamic linker. Protein preservation data was obtained from two enzymes, horseradish peroxidase (HRP) and alc. dehydrogenase (ADH). For example, a bioprotective glass made of dextran, inulin, and glycerol was more effective at preserving HRP at room temp. than one made of any one or two of the components without the other(s). It is believed that inulin acts as a dynamic linker in the dextran/inulin/glycerol glass.

IT 585-88-6, Maltitol

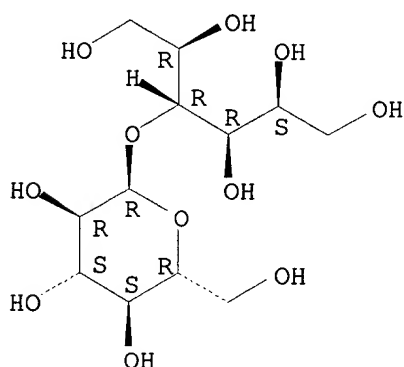
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(plasticized hydrophilic glasses for improved stabilization of biol. agents)

RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L96 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:60475 CAPLUS

DOCUMENT NUMBER: 139:312181

TITLE: Investigations on the predictability of the formation of glassy solid solutions of drugs in sugar alcohols

AUTHOR(S): Langer, M.; Holtje, M.; Urbanetz, N. A.; Brandt, B.; Holtje, H.-D.; Lippold, B. C.

CORPORATE SOURCE: Heinrich-Heine-Universitaet Duesseldorf, Duesseldorf, Germany

SOURCE: International Journal of Pharmaceutics (2003), 252(1-2), 167-179

CODEN: IJPHDE; ISSN: 0378-5173

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A prerequisite for the formation of glassy solid solns. prepd. by the melting method is the miscibility of the resp. drug and the carrier in the molten state. As could be shown exptl., all investigated drug/sugar alc. combinations miscible in the molten state form to some extent glassy solid solns., dependent on their tendency to recrystallize during prepn. Therefore, the present study focuses on the evaluation of factors that govern the miscibility of molten drugs and sugar alcs. as carriers. In this context, soly. parameters are discussed as a means of predicting miscibility in comparison to a new approach, using calcd. interaction parameters derived from mol. dynamics (MD) studies. There is evidence that a Coulomb interaction term CSR, comprising short-range electrostatic interactions and hydrogen bonding energy is essential for the miscibility of drug and carrier in the molten state. To relate CSR to the mol. vol., a non-dimensional parameter Pi is defined. For this parameter, a limiting value for miscibility exists. Contrary, calcd. soly. parameter differences between drug and sugar alc. in the range of 8-15 MPa<sup>1/2</sup> are

not suitable for a prediction of miscibility or immiscibility, since the mixts. deviate from regular soln. behavior. In irregular mixts. of drugs and sugar alcs., an excess entropy and the formation of hydrogen bonds between unlike mols. favor miscibility, that cannot be predicted by regular soln. theory.

IT 585-88-6, Maltisorb 64519-82-0, Isomalt

81025-04-9, Lactitol monohydrate

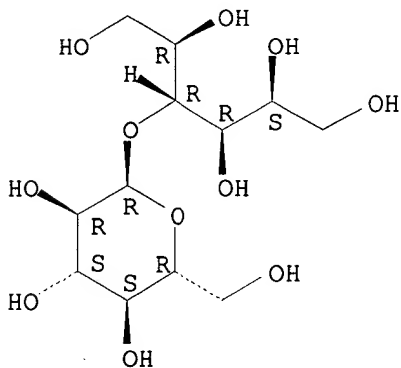
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(investigations on the predictability of the formation of glassy solid solns. of drugs in sugar alcs.)

RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 64519-82-0 CAPLUS

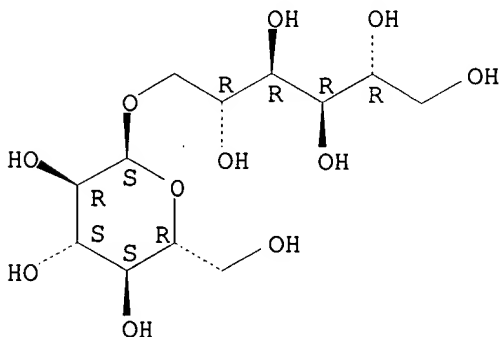
CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8

CMF C12 H24 O11

Absolute stereochemistry.

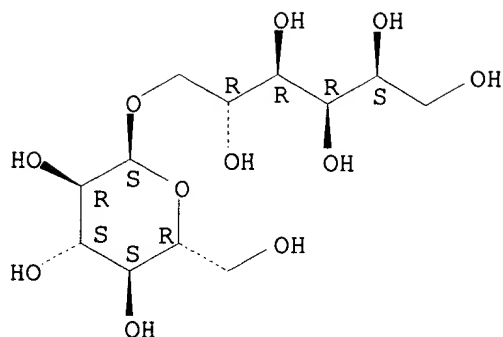


CM 2

CRN 534-73-6

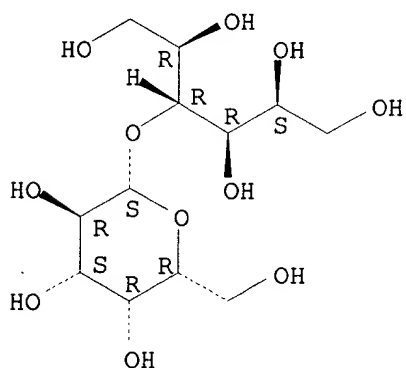
CMF C12 H24 O11

Absolute stereochemistry.



RN 81025-04-9 CAPLUS  
CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl-, monohydrate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● H<sub>2</sub>O

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2002:657929 CAPLUS  
DOCUMENT NUMBER: 137:206535  
TITLE: Composition and method for controlled release injections  
INVENTOR(S): Roser, Bruce  
PATENT ASSIGNEE(S): Cambridge Biostability Ltd., UK; Idea, Inc.  
SOURCE: PCT Int. Appl., 23 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002066005	A1	20020829	WO 2002-US4269	20020214
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,  
TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2002155129 A1 20021024 US 2001-784153 20010216

US 6623762 B2 20030923

EP 1359899 A1 20031112 EP 2002-720970 20020214

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: US 2001-784153 A 20010216

WO 2002-US4269 W 20020214

AB The present invention is a pharmaceutical compn. and method for  
controlling the release of a drug or vaccine to a patient where a slow,  
controlled release of drug or antigen occurs over a considerable period of  
time after injection. The drug or vaccine is contained in sugar glass  
microspheres and then placed in an anhyd. liq., preferably  
perfluorocarbon, so that the vaccine is protected against dissoln. while  
remaining surrounded by anhyd. liq. This simple non-toxic system,  
deliverable by current syringe or present or future needle-free systems,  
is inexpensive and reliable and aids in parenteral drug delivery or mass  
immunization campaigns by reducing the need for repeated injections.  
There was a slow controlled-release of model antigen (alk. phosphatase)  
which had been suspended in perfluorophenanthrene.

IT 585-86-4, Lactitol 585-88-6, Maltitol

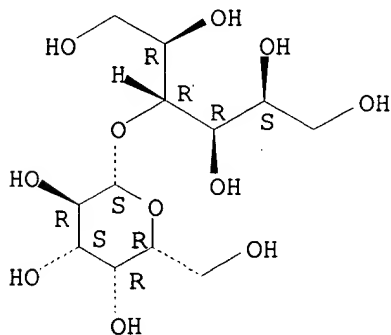
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)

(controlled release injections contg. perfluorocarbons)

RN 585-86-4 CAPLUS

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

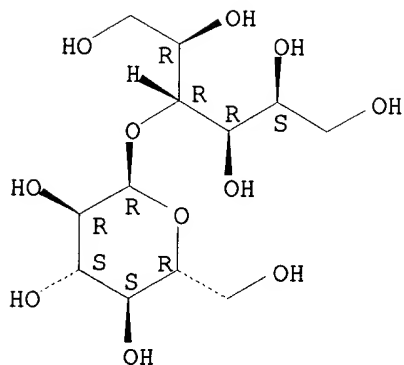
Absolute stereochemistry.



RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:493350 CAPLUS

DOCUMENT NUMBER: 138:243016

TITLE: Contribution of Temperature Modulated DSC to the Study of the Molecular Mobility in **Glass** Forming Pharmaceutical Systems

AUTHOR(S): Carpentier, L.; Bourgeois, L.; Descamps, M.

CORPORATE SOURCE: Laboratoire de Dynamique et Structure des Matériaux Moléculaire, U.P.R.E.S.A. CNRS 8024, Villeneuve d'Ascq, 59655, Fr.

SOURCE: Journal of Thermal Analysis and Calorimetry (2002), 68(2), 727-739

CODEN: JTACF7; ISSN: 1418-2874

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The temp. modulated differential scanning calorimetry (MDSC) technique has been used to characterize the low frequency mol. mobility of indomethacin and maltitol just above their resp. calorimetric glass transition temp. Tg. Anal. has been made using the concept of complex sp. heat. Spectroscopic information are thus obtained through the temp. dependence of the isochronal real and imaginary parts C' and C''. This gives access to the fragility index m and the stretched exponent .beta.. The comparison with dielec. spectroscopy has been performed to check the coherence of spectroscopic information. Measurements on maltitol enable to demonstrate the useful complementarity of the technique when the low frequencies dielec. relaxations are occulted by the presence of conductors default.

IT 585-88-6, Maltitol

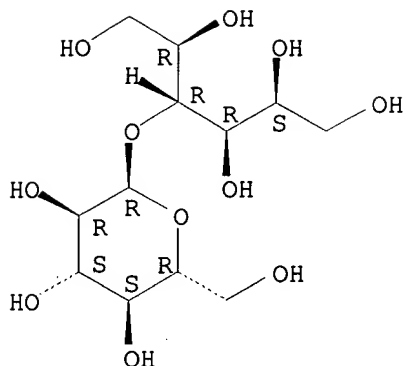
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mol. mobility of indomethacin and maltitol using temp. modulated DSC)

RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:149901 CAPLUS

DOCUMENT NUMBER: 137:341986

TITLE: Direct compression properties of melt-extruded isomalt

AUTHOR(S): Ndindayino, F.; Henrist, D.; Kiekens, F.; Van den Mooter, G.; Vervaet, C.; Remon, J. P.

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Laboratory of Pharmaceutical Technology, Ghent University, Ghent, 9000, Belg.

SOURCE: International Journal of Pharmaceutics (2002), 235(1-2), 149-157

CODEN: IJPHDE; ISSN: 0378-5173

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Isomalt, a sugar alc., was melt-extruded prior to compression in order to improve its tableting properties. After fusion, cryst. isomalt was transformed into an amorphous form as shown by x-ray diffraction and DSC. The tableting properties of amorphous isomalt were dramatically improved. Mixts. formulated with paracetamol (50%) and extruded isomalt yielded hard tablets. However, extruded isomalt powder showed agglomeration problems due to recrystn. of the amorphous phase into a stable cryst. form in the presence of atm. moisture. The evolution of the moisture content correlated well with the compressibility data. The tablets made of extruded isomalt powder had a lower friability in comparison to the tablets formulated with non-extruded isomalt powder. Their disintegration was fast and a rapid dissoln. rate was recorded. Extruded isomalt displayed excellent tableting properties; however, further expts. should be conducted to delay or even prevent recrystn. of amorphous isomalt.

IT 64519-82-0, Palatinit C

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(direct compression properties of melt-extruded isomalt)

RN 64519-82-0 CAPLUS

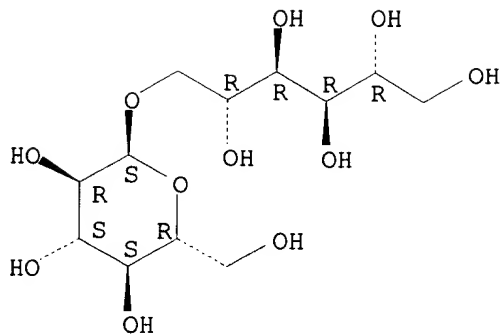
CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8

CMF C12 H24 O11

Absolute stereochemistry.

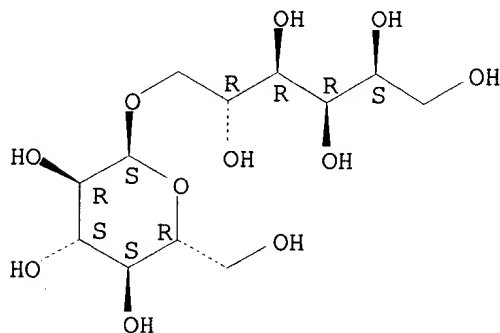


CM 2

CRN 534-73-6

CMF C12 H24 O11

Absolute stereochemistry.



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:489262 CAPLUS

DOCUMENT NUMBER: 135:82018

TITLE: Particulate vitamin composition comprising an oil of a vitamin

INVENTOR(S): Chiavazza, Veronique; Statiotis, Eraclis

PATENT ASSIGNEE(S): Aventis Animal Nutrition S.A., Fr.

SOURCE: PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001047560	A2	20010705	WO 2000-EP13385	20001219
WO 2001047560	A3	20020117		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,



YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1244472 A2 20021002 EP 2000-988814 20001219

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2003518509 T2 20030610 JP 2001-548148 20001219

US 2003068407 A1 20030410 US 2002-168317 20020620

PRIORITY APPLN. INFO.:

EP 1999-125694 A 19991223

WO 2000-EP13385 W 20001219

AB A particulate compn. comprising (a) an oil of a vitamin, an oil contg. one or more vitamin or a deriv., (b) a gelling agent of vegetable origin, having a glass transition point greater than 20 .degree.C, and (c) a protein, except gelatine. A particulate vitamin emulsion contained carrageenan 2.69, calcium carbonate 9.62, casein 1.92, water 80.77, vitamin A 4.04, and Bu hydroxytoluene 0.96%.

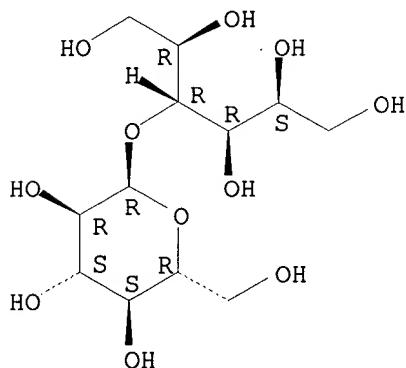
IT 585-88-6, maltitol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(particulate vitamin compn. comprising oil of vitamin)

RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L96 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:129878 CAPLUS

DOCUMENT NUMBER: 134:183489

TITLE: Composition for stable injectable liquids containing perfluorocarbons

INVENTOR(S): Roser, Bruce Joseph; Garcia De Castro, Arcadio; Maki, James

PATENT ASSIGNEE(S): Ronai, Peter M., USA

SOURCE: U.S., 9 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6190701	B1	20010220	US 1999-271204	19990317

PRIORITY APPLN. INFO.: US 1999-271204 19990317

AB A compn. for delivering a stable, bioactive compd. to a subject comprising a first component and a second component, the first component comprises microparticles of sugar glass or a phosphate glass contg. the bioactive

agent. The sugar glass or phosphate glass optionally includes a glass formation facilitator compd. The second component comprises at least one biocompatible liq. perfluorocarbon in which the first component is insol. and dispersed. The liq. perfluorocarbon optionally includes a surfactant. For example, alk. phosphatase was stabilized in a glass based on mannitol 33.3%, calcium phosphate 33.3% and degraded gelatin 33.3 %, spray dried as microspheres and stored at 55.degree. either as the dry powder or as a suspension in perfluorodecalin. The enzyme microspheres suspended in perfluorodecalin show retention of close to 100% of enzyme activity for > 30 days at 55.degree..

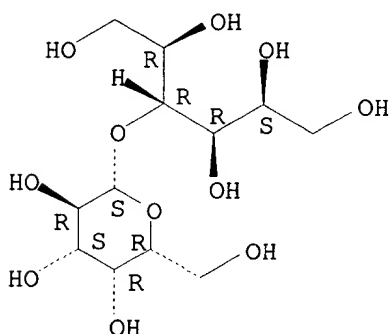
IT 585-86-4, Lactitol 64519-82-0, Palatinit

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(injectable compns. contg. drugs, enzymes, and vaccines stabilized in sugar or phosphate glasses and liq. perfluorocarbons)

RN 585-86-4 CAPLUS

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 64519-82-0 CAPLUS

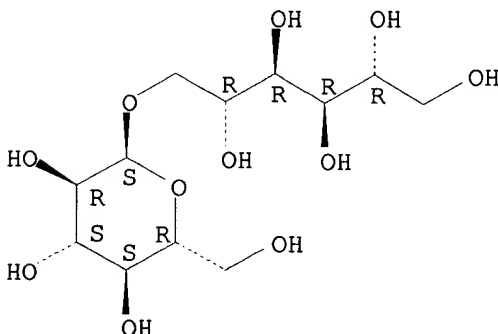
CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8

CMF C12 H24 O11

Absolute stereochemistry.

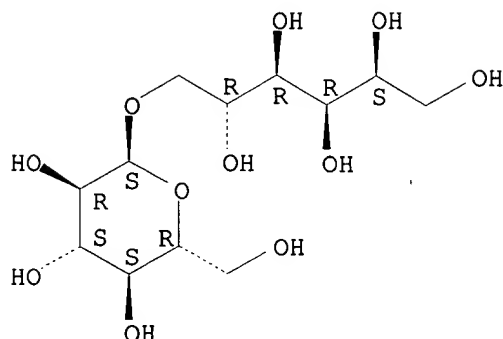


CM 2

CRN 534-73-6

CMF C12 H24 O11

Absolute stereochemistry.



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2000:756507 CAPLUS  
 DOCUMENT NUMBER: 133:325636  
 TITLE: Dry, moldable drug formulation  
 INVENTOR(S): Buch-Rasmussen, Thomas; Aasmul, Soren; Poulsen, Jens-Ulrik; Flink, James M.; Hansen, Philip; Juul-Mortensen, Claus  
 PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.  
 SOURCE: PCT Int. Appl., 40 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000062759	A1	20001026	WO 2000-DK184	20000413
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1173151	A1	20020123	EP 2000-918719	20000413
EP 1173151	B1	20030709		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002542183	T2	20021210	JP 2000-611896	20000413
AT 244558	E	20030715	AT 2000-918719	20000413
PRIORITY APPLN. INFO.: DK 1999-514 A 19990416				
WO 2000-DK184 W 20000413				

AB The present invention relates to a solid pharmaceutical compn. for parenteral injection comprising a binder and at least one therapeutic agent, said binder constituting at least 0.5 % by wt. of the compn. and said binder comprising at least one binding agent being a carbohydrate, and optionally at least one non-crystn. agent, whereby said binder forms an amorphous matrix, and the amt. of said therapeutic agent consisting of at least one dosage. The pharmaceutical compn. has the strength to be injected directly with the need of using cannulas or the like. The

therapeutic agent may be any pharmaceutical suitable for injection, such as s.c. or i.m. injection. A compn. comprising 100% C\*Maltidex H16323 (88% maltitol) was prepd.

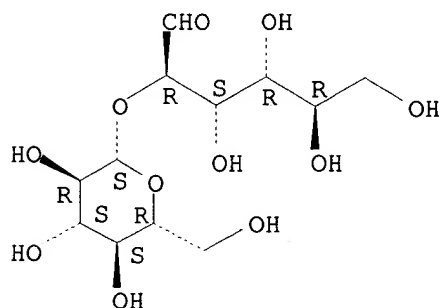
IT 534-46-3, Sophorose 547-25-1, Turanose 585-88-6  
, Maltitol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(dry, moldable drug formulation)

RN 534-46-3 CAPLUS

CN D-Glucose, 2-O-.beta.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

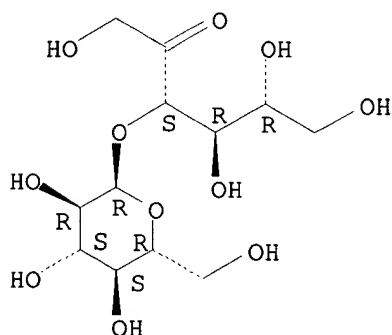
Absolute stereochemistry.



RN 547-25-1 CAPLUS

CN D-Fructose, 3-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

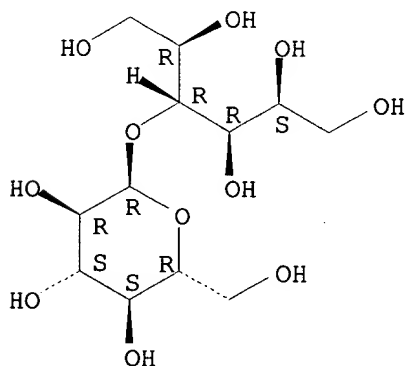
Absolute stereochemistry.



RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

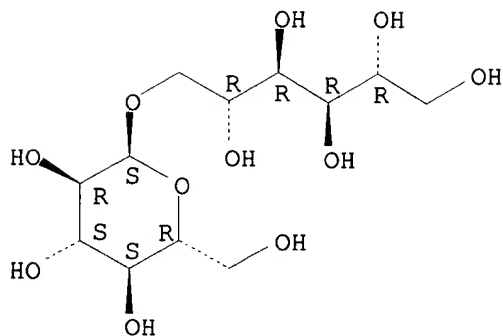


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1999:613714 CAPLUS  
DOCUMENT NUMBER: 131:248244  
TITLE: Amorphous glasses for stabilizing sensitive products  
INVENTOR(S): Roser, Bruce Joseph; De Castro, Arcadio Garcia  
PATENT ASSIGNEE(S): Cambridge Biostability Limited, UK  
SOURCE: PCT Int. Appl., 26 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9947174	A1	19990923	WO 1999-GB820	19990317
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9929451	A1	19991011	AU 1999-29451	19990317
EP 1071465	A1	20010131	EP 1999-910516	19990317
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
PRIORITY APPLN. INFO.:			GB 1998-5699	A 19980318
			GB 1998-20689	A 19980923
			WO 1999-GB820	W 19990317
AB	A method of drying, without damage, a compd. which is subject to deactivation on drying, or a mixt. of such compds., comprises subjecting an aq. system contg. the compd. or mixt. to drying in the presence of .gtoreq.1 chem. inert monosaccharide sugar alc. and .gtoreq.1 additive which is a glass-former or a glass formation facilitator, whereby the compd. solidifies from soln. as an amorphous glass rather than by forming crystals. This method is useful for drying compds. at or above room temp. which are otherwise subject to deactivation on drying. Thus, alk. phosphatase, vacuum-dried or freeze-dried in a glass-forming blend of mannitol 30, inositol 15, galactitol 15, and Byco C (degraded gelatin) 40%, was stable during storage at 37.degree. or 50.degree. for 5 wk.			
IT	64519-82-0, Palatinit			
	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (crystn. inhibitor; amorphous glasses for stabilizing sensitive products)			
RN	64519-82-0 CAPLUS			
CN	D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)			
CM	1			
CRN	20942-99-8			
CMF	C12 H24 O11			

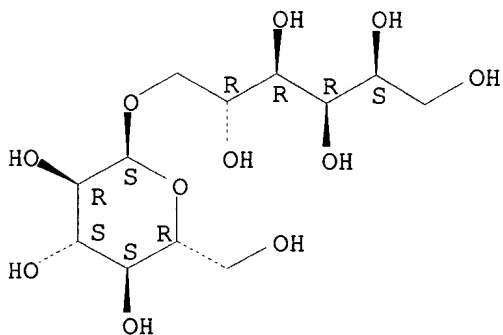
Absolute stereochemistry.



CM 2

CRN 534-73-6  
CMF C12 H24 O11

Absolute stereochemistry.



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1999:405173 CAPLUS  
 DOCUMENT NUMBER: 131:43592  
 TITLE: .beta.(1-3)-Glucan diagnostic assays  
 INVENTOR(S): Wakshull, Eric M.; Mackin, William M.; Zimmerman, Janet W.; Fisette, Leslie W.  
 PATENT ASSIGNEE(S): Alpha-Beta Technology, Inc., USA  
 SOURCE: PCT Int. Appl., 56 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 6  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9931510	A1	19990624	WO 1998-US24014	19981112
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,				

FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,  
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6084092 A 20000704 US 1997-990125 19971212  
CA 2314342 AA 19990624 CA 1998-2314342 19981112  
AU 9913967 A1 19990705 AU 1999-13967 19981112  
AU 740158 B2 20011101  
EP 1038180 A1 20000927 EP 1998-957794 19981112

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

JP 2002508518 T2 20020319 JP 2000-539356 19981112  
PRIORITY APPLN. INFO.: US 1997-990125 A 19971212  
US 1997-797696 A2 19970131  
WO 1997-US7445 A2 19970501  
WO 1998-US24014 W 19981112

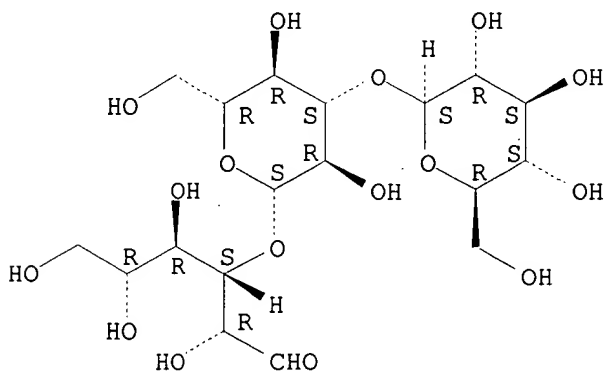
AB Methods of isolating .beta.(1-3)-glucan or .beta.(1-3)-glucan-contg. organisms in a sample, or of detecting the presence of .beta.(1-3)-glucan or .beta.(1-3)-glucan-contg. organisms in a sample, utilizing binding agents for .beta.(1-3)-glucan, such as LacCer, GalCer, globotriaosylceramide and asialoganglioside-GM1, are described. Methods of diagnosing fungal infection, by detecting .beta.(1-3)-glucan or .beta.(1-3)-glucan-contg. organisms, are also described. Antibodies and kits useful in the methods are also disclosed.

IT 3256-04-0, Laminaritriose 26212-72-6, Laminaritetraose  
RL: ARU (Analytical role, unclassified); THU (Therapeutic use);  
ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(.beta.(1.fwdarw.3)-glucan diagnostic assays using .beta.(1.fwdarw.3)-glucan binding agent and labeled antibody)

RN 3256-04-0 CAPLUS

CN D-Glucose, O-.beta.-D-glucopyranosyl-(1.fwdarw.3)-O-.beta.-D-glucopyranosyl-(1.fwdarw.3)- (9CI) (CA INDEX NAME)

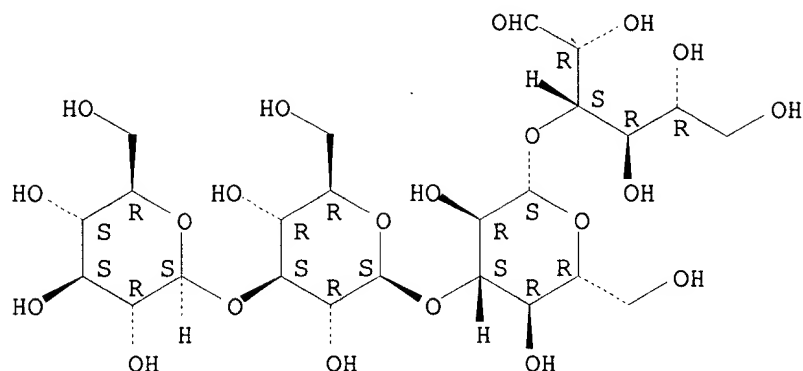
Absolute stereochemistry.



RN 26212-72-6 CAPLUS

CN D-Glucose, O-.beta.-D-glucopyranosyl-(1.fwdarw.3)-O-.beta.-D-glucopyranosyl-(1.fwdarw.3)-O-.beta.-D-glucopyranosyl-(1.fwdarw.3)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1999:48730 CAPLUS  
 DOCUMENT NUMBER: 130:129975  
 TITLE: Modified glycosides and compositions comprised thereof for medical and other uses  
 INVENTOR(S): Colaco, Camilo  
 PATENT ASSIGNEE(S): Quadrant Holdings Cambridge Limited, UK  
 SOURCE: PCT Int. Appl., 39 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9901463	A2	19990114	WO 1998-GB1962	19980703
WO 9901463	A3	19990325		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, GE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
EP 994887	A2	20000426	EP 1998-932361	19980703
EP 994887	B1	20021127		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002510316	T2	20020402	JP 1999-506677	19980703
AT 228528	E	20021215	AT 1998-932361	19980703
ES 2187038	T3	20030516	ES 1998-932361	19980703
US 2002009464	A1	20020124	US 2001-923023	20010806
PRIORITY APPLN. INFO.: US 1997-51727P P 19970703				
WO 1998-GB1962 W 19980703				
US 1998-111925 A1 19980708				

AB Modified glycosides YnX (Y = saccharide subunit; X = C5-6 sugar alc.; n = 1-6; part or all of the OH groups in X and Y are derivatized as esters or ethers) are provided which can be used to form a variety of materials including biodegradable solid delivery systems and optically clear colored devices or coatings. The solid delivery systems can be used for delivery and release of a variety of substances including lipids, proteins, peptides, peptidomimetics, hormones, saccharides, nucleic acids, and



nucleoproteins, as well as viruses, bacteria, antigens, and haptens coupled to carriers; they can be in the form of tablets for oral administration, or in the form of powders, microspheres or implants for i.v., intradermal, transdermal, pulmonary, or other route of administration. The modified glycosides may be processed to form a vitreous glass matrix having a substance, such as a therapeutic agent, or an optically active dye incorporated therein. The vitreous glass matrix may be provided in a solid dosage form which is capable of releasing a therapeutic substance in situ at various controlled rates. Alternatively, a melt or soln. contg. modified glycosides and a dye can be used to produce optically clear colored coatings, plastic articles, and synthetic fibers. Thus, nonaacylated derivs. of lactitol, palatinit, .alpha.-D-glucopyranosyl-(1.fwdarw.6)-sorbitol, and .alpha.-D-glucopyranosyl-(1.fwdarw.6)-mannitol with a range of m.p. values and glass transition temps. were produced by reaction of the polyols with Ac<sub>2</sub>O. Glasses produced by quenching melts of the acetylated polyols were good solvents for poorly water-sol. solutes such as Disperse Red 1; the solutes had little effect on the glass transition temp. and did not cause devitrification. Lactitol nonaacetate glasses contg. cyclosporin A and diltiazem-HCl showed different profiles of controlled release on immersion in saline soln.; the release rates were altered by addn. of Tween 20 to the soln.

IT 37091-07-9P, Lactitol nonaacetate 41897-24-9P, Maltitol nonaacetate 41897-25-0P 219827-68-6P 219827-69-7P

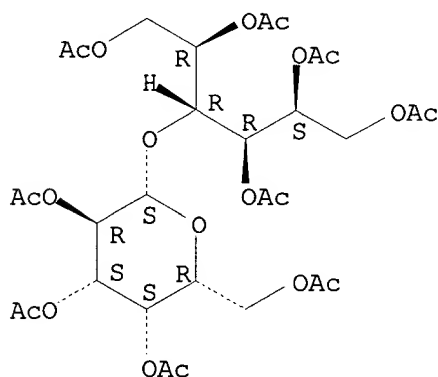
RL: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(modified glycosides and compns. comprised thereof for medical and other uses)

RN 37091-07-9 CAPLUS

CN D-Glucitol, 4-O-(2,3,4,6-tetra-O-acetyl-.beta.-D-galactopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

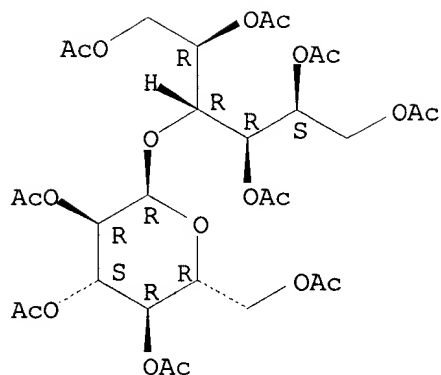
Absolute stereochemistry.



RN 41897-24-9 CAPLUS

CN D-Glucitol, 4-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

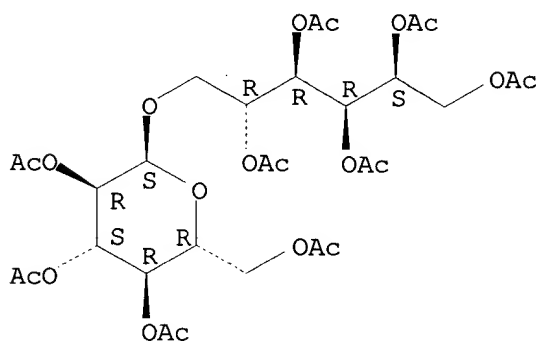
Absolute stereochemistry.



RN 41897-25-0 CAPLUS

CN D-Glucitol, 6-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

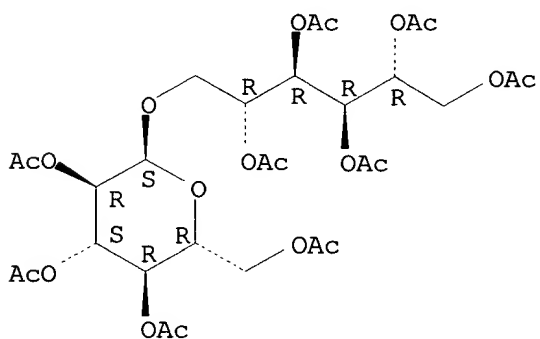
Absolute stereochemistry.



RN 219827-68-6 CAPLUS

CN D-Mannitol, 1-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



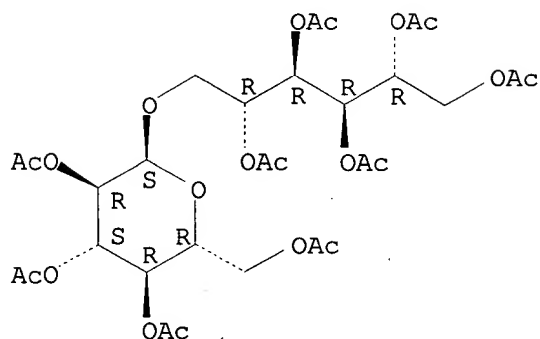
RN 219827-69-7 CAPLUS

CN D-Glucitol, 6-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate, mixt. with 1-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)[D-mannitol] pentaacetate (9CI) (CA INDEX NAME)

CM 1

CRN 219827-68-6  
CMF C30 H42 O20

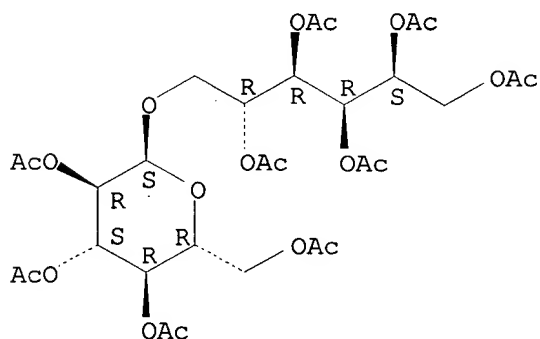
Absolute stereochemistry.



CM 2

CRN 41897-25-0  
CMF C30 H42 O20

Absolute stereochemistry.



L96 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1998:635637 CAPLUS  
DOCUMENT NUMBER: 129:265476  
TITLE: Stable particle in liquid formulations comprising  
sugar **glass**  
INVENTOR(S): Roser, Bruce Joseph; Sen, Shevanti Devika  
PATENT ASSIGNEE(S): Eastbridge Ltd., UK  
SOURCE: PCT Int. Appl., 40 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9841188	A2	19980924	WO 1998-GB817	19980318
WO 9841188	A3	19981210		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,  
DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,

KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,  
 NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,  
 UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,  
 FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,  
 GA, GN, ML, MR, NE, SN, TD, TG

AU 9865101 A1 19981012 AU 1998-65101 19980318

AU 722627 B2 20000810

EP 1007000 A2 20000614 EP 1998-910875 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, FI

BR 9808920 A 20000801 BR 1998-8920 19980318

NZ 337666 A 20010427 NZ 1998-337666 19980318

JP 2002504090 T2 20020205 JP 1998-540262 19980318

NO 9904508 A 19991117 NO 1999-4508 19990917

US 6669963 B1 20031230 US 1999-380485 19991104

PRIORITY APPLN. INFO.:

GB 1997-5588 A 19970318

WO 1998-GB817 W 19980318

AB A stable particle in liq. formulation comprising a discontinuous phase of microparticles is suspended in a continuous phase which is a non-aq. liq., preferably biocompatible in which the microparticles are insol. The microparticles comprise finely powd. sugar glass selected from the group consisting of trehalose, palatinit, glucopyranosyl sorbitol, glucopyranosyl mannitol, lactitol and monosaccharide alcs. such as mannitol and inositol, holding at least one biomol. product, the biomol. product in the sugar glass either being in stable solid soln. or being itself in suspension in the sugar glass. A monodisperse single-particle suspension of microparticles can be produced in the non-aq. continuous liq. phase by inclusion in the continuous phase of at least one surfactant having a low or very low HLB. A soln. contg. trehalose 0.6, sodium sulfate 0.35 M, bovine serum albumin 0.75, zinc chloride 1, magnesium chloride 1 mM, and alk. phosphatase 40 units/mL was spray dried. When the powder was stored at 37.degree., there was no loss of enzyme activity over 84 days of storage.

IT 534-73-6 585-86-4, Lactitol 20942-99-8

64519-82-0, Palatinit

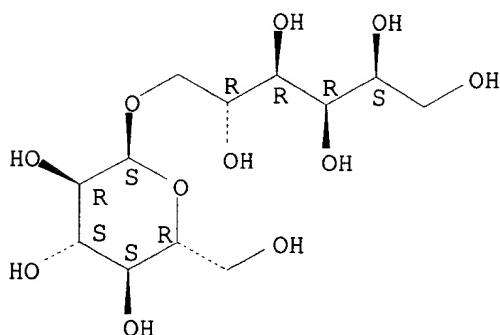
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(stable particle in liq. formulations comprising sugar glass)

RN 534-73-6 CAPLUS

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

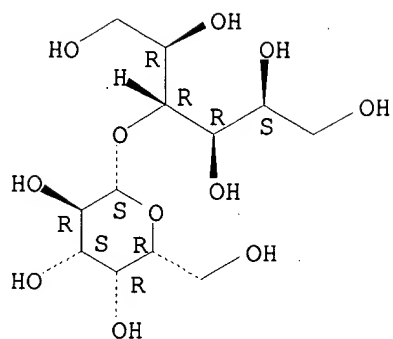
Absolute stereochemistry.



RN 585-86-4 CAPLUS

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

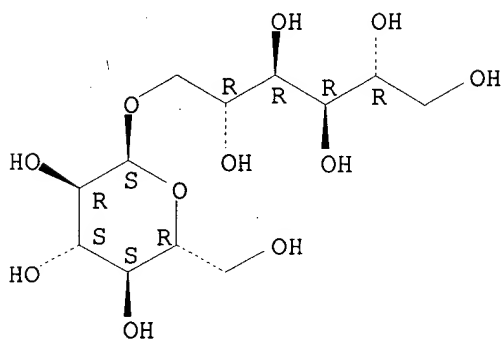
Absolute stereochemistry.



RN 20942-99-8 CAPLUS

CN D-Mannitol, 1-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 64519-82-0 CAPLUS

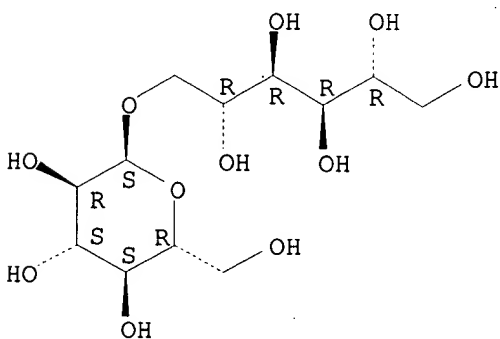
CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8

CMF C12 H24 O11

Absolute stereochemistry.

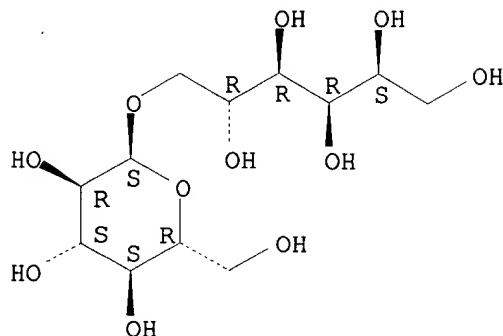


CM 2

CRN 534-73-6

CMF C12 H24 O11

Absolute stereochemistry.



L96 ANSWER 14 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1997:132798 CAPLUS  
 DOCUMENT NUMBER: 126:148555  
 TITLE: Methods for stably incorporating substances within dry, foamed **glass** matrixes and compositions obtained thereby  
 INVENTOR(S): Roser, Bruce Joseph; Gribbon, Enda Martin  
 PATENT ASSIGNEE(S): Quadrant Holdings Cambridge Limited, UK; Roser, Bruce Joseph; Gribbon, Enda Martin  
 SOURCE: PCT Int. Appl., 43 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9640077	A2	19961219	WO 1996-GB1367	19960607
WO 9640077	A3	19970123		
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
CA 2223438	AA	19961219	CA 1996-2223438	19960607
AU 9660098	A1	19961230	AU 1996-60098	19960607
AU 713599	B2	19991209		
EP 831790	A2	19980401	EP 1996-917569	19960607
EP 831790	B1	20030507		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI				
CN 1193908	A	19980923	CN 1996-194617	19960607
BR 9609188	A	19990511	BR 1996-9188	19960607
JP 11506467	T2	19990608	JP 1997-500235	19960607
IL 122482	A1	19991028	IL 1996-122482	19960607
AP 852	A	20000616	AP 1997-1151	19960607
W: KE, LS, MW, SD, SZ, UG				
PL 184823	B1	20021231	PL 1996-323902	19960607
AT 239451	E	20030515	AT 1996-917569	19960607
PT 831790	T	20030731	PT 1996-96917569	19960607
NO 9705773	A	19980203	NO 1997-5773	19971208
PRIORITY APPLN. INFO.:			US 1995-486043	A 19950607

WO 1996-GB1367 W 19960607

AB The invention provides methods for producing foamed glass matrixes and compns. The compns. are suitable for stable storage of a wide variety of substances, particularly biol. substances and pharmaceuticals. The effect of additives, e.g., Na metabisulfite, on foamed glass matrixes formation were detd. Rapid dissoln. of the foamed glass matrixes was obsd. on reconstitution.

IT 585-86-4, Lactitol 585-88-6, Maltitol 64519-82-0

, Palatinit

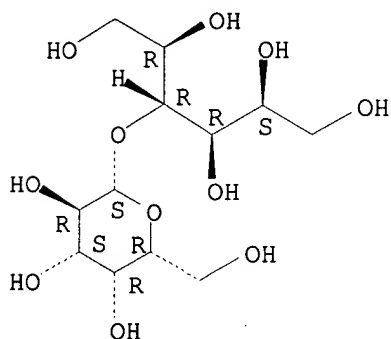
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(storage stability of pharmaceuticals in foamed glass matrixes)

RN 585-86-4 CAPLUS

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

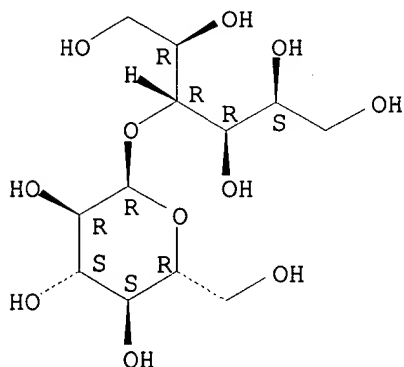
Absolute stereochemistry.



RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 64519-82-0 CAPLUS

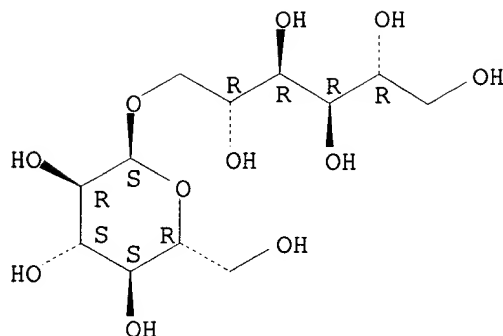
CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8

CMF C12 H24 O11

Absolute stereochemistry.

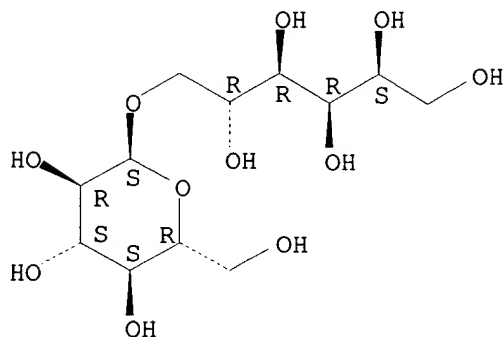


CM 2

CRN 534-73-6

CMF C12 H24 O11

Absolute stereochemistry.



L96 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1997:101558 CAPLUS  
 DOCUMENT NUMBER: 126:101463  
 TITLE: Cell culture material modified with carbohydrate  
 INVENTOR(S): Yura, Hirofumi; Goto, Mitsuaki; Kobayashi, Kazukyo;  
 Akaike, Toshihiro  
 PATENT ASSIGNEE(S): Kanagawa Kagaku Gijutsu Akadem, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08317786	A2	19961203	JP 1996-87195	19960315
JP 3177610	B2	20010618		

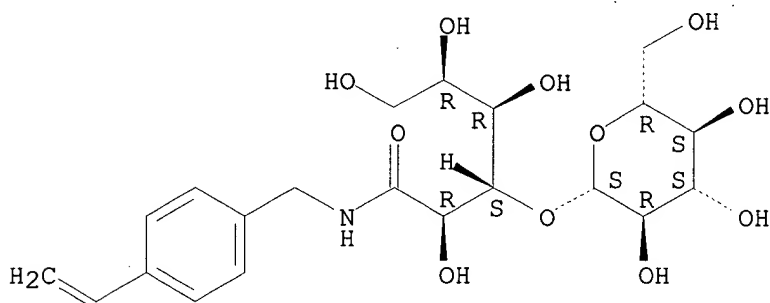
PRIORITY APPLN. INFO.: JP 1995-86527 A 19950317

AB The surface of cell culture container, flask, plate, film, etc. is modified with carbohydrate polymer to regulate the morphol. change, proliferation, etc. of cultured cells. The cell culture device is based on e.g. polystyrene and is modified with carbohydrate selected from poly-[N-p-vinylbenzyl-[O-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-D-glucosamide]], poly-[N-p-vinylbenzyl-[O-.beta.-D-galactopyranosyl-



(1.fwdarw.4)-D-gluconamide]],.  
 IT 185826-24-8  
 RL: BUU (Biological use, unclassified); DEV (Device component use)  
 ; MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
 (cell culture material modified with carbohydrate)  
 RN 185826-24-8 CAPLUS  
 CN D-Gluconamide, N-[(4-ethenylphenyl)methyl]-3-O-.beta.-D-glucopyranosyl-  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L96 ANSWER 16 OF 26 USPATFULL on STN  
 ACCESSION NUMBER: 2003:231683 USPATFULL  
 TITLE: Solid dose micro implant  
 INVENTOR(S): Hansen, Henrik Egesborg, Hellerup, DENMARK  
 Buch-Rasmussen, Thomas, Gentofte, DENMARK  
 Sabra, Mads Christian, Kobenhavn, DENMARK

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003161881	A1	20030828
APPLICATION INFO.:	US 2002-322143	A1	20021218 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	DK 2001-1901	20011218
	US 2001-342065P	20011219 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Reza Green, Esq., Novo Nordisk Pharmaceuticals, Inc., 100 College Road West, Princeton, NJ, 08540	
NUMBER OF CLAIMS:	95	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	1427	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A solid pharmaceutical composition for parenteral administration having an inner matrix containing at least one therapeutic agent, and a biodegradable, and water-impermeable coating covering part of the surface of said composition. The inner matrix disintegrates upon contact with animal tissue or tissue fluids. By providing a disintegratable and/or soluble inner matrix comprising the drug with a water-impermeable coating covering part of the surface of said composition, the rate of release of the drug can be controlled. The specific rate of release can be controlled by carefully designing the part of the surface which is not covered.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 534-46-3, Sophorose 547-25-1, Turanose 585-88-6

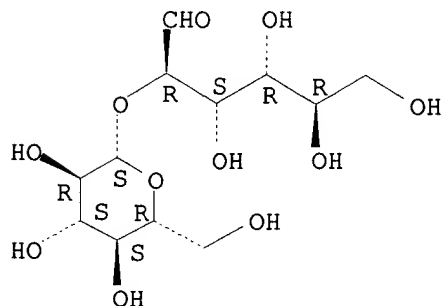
, Maltitol

(solid pharmaceutical for parenteral administration)

RN 534-46-3 USPATFULL

CN D-Glucose, 2-O-.beta.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

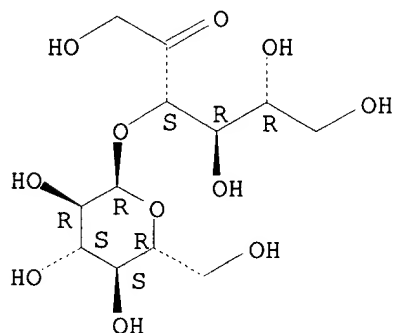
Absolute stereochemistry.



RN 547-25-1 USPATFULL

CN D-Fructose, 3-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

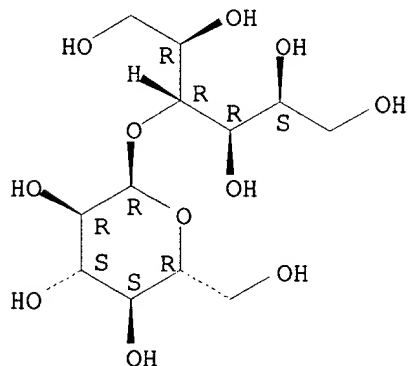
Absolute stereochemistry.



RN 585-88-6 USPATFULL

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L96 ANSWER 17 OF 26 USPATFULL on STN

ACCESSION NUMBER: 2003:99302 USPATFULL

TITLE: Particulate vitamin composition

Searched by Barb O'Bryen, STIC 308-4291

INVENTOR(S): Chiavazza, Veronique, Caluire, FRANCE  
Statiotis, Eraclis, Villette d'Anthon, FRANCE

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003068407	A1	20030410
APPLICATION INFO.:	US 2002-168317	A1	20020620 (10)
	WO 2000-EP13385		20001219

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1999-125694	19991223
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FINNEGAN, HENDERSON, FARABOW, GARRETT &, DUNNER LLP, 1300 I STREET, NW, WASHINGTON, DC, 20006	
NUMBER OF CLAIMS:	14	
EXEMPLARY CLAIM:	1	
LINE COUNT:	610	

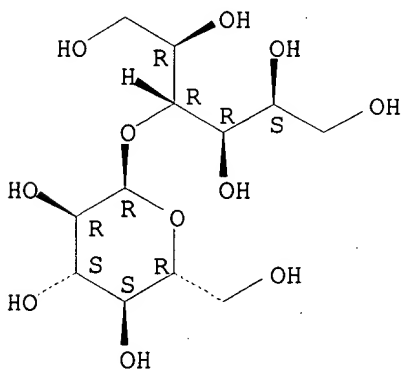
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A particulate composition comprising (a) an oil of a vitamin, an oil containing one or more vitamin or a derivative, (b) a gelling agent of vegetable origin, having a glass transition point greater than 20.degree. C., and (c) a protein, except gelatine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 585-88-6, maltitol  
(particulate vitamin compn. comprising oil of vitamin)  
RN 585-88-6 USPATFULL  
CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L96 ANSWER 18 OF 26 USPATFULL on STN  
ACCESSION NUMBER: 2003:337150 USPATFULL  
TITLE: Stable particle in liquid formulations  
INVENTOR(S): Kampinga, Jaap, Groningen, NETHERLANDS  
PATENT ASSIGNEE(S): Elan Drug Delivery Limited, Nottingham, UNITED KINGDOM  
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6669963	B1	20031230
	WO 9841188		19980924
APPLICATION INFO.:	US 1999-380485		19991104 (9)
	WO 1998-GB817		19980318

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1997-5588	19970318
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Low, Christopher S. F.	
ASSISTANT EXAMINER:	Lukton, David	
LEGAL REPRESENTATIVE:	Morrison & Foerster LLP	
NUMBER OF CLAIMS:	30	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Figure(s); 8 Drawing Page(s)	
LINE COUNT:	728	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A stable particle in liquid formulation comprising a discontinuous phase of microparticles is suspended in a continuous phase which is a non-aqueous liquid, preferably biocompatible in which the microparticles are insoluble. The microparticles comprise finely powdered sugar glass, such as trehalose, palatinit, glucopyranosyl sorbitol, glucopyranosyl mannitol, lactitol and monosaccharide alcohols, such as mannitol and inositol, holding at least one biomolecular product, the biomolecular product in the sugar glass either being in stable solid solution or being itself in suspension in the sugar glass.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 534-73-6 585-86-4, Lactitol 20942-99-8

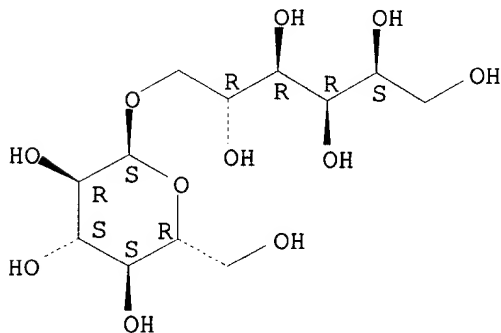
64519-82-0, Palatinit

(stable particle in liq. formulations comprising sugar **glass**)

RN 534-73-6 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

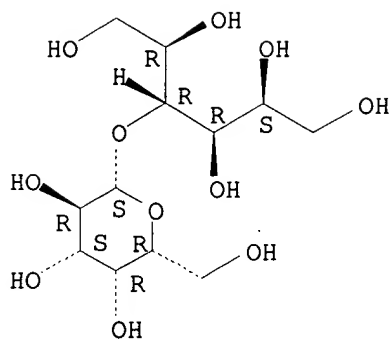
Absolute stereochemistry.



RN 585-86-4 USPATFULL

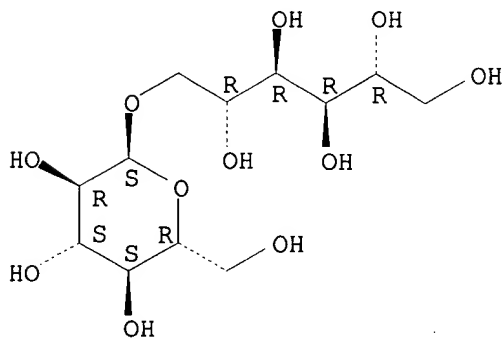
CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 20942-99-8 USPATFULL  
CN D-Mannitol, 1-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

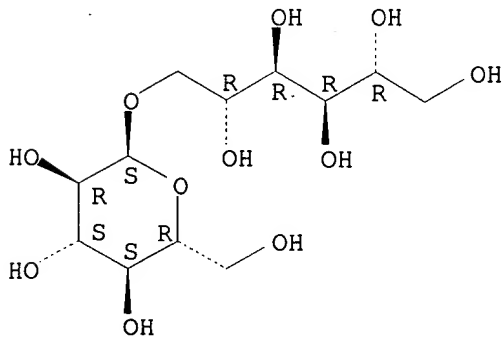


RN 64519-82-0 USPATFULL  
CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8  
CMF C12 H24 O11  
CDES 5:A-D-GLUCO,D-MANNO

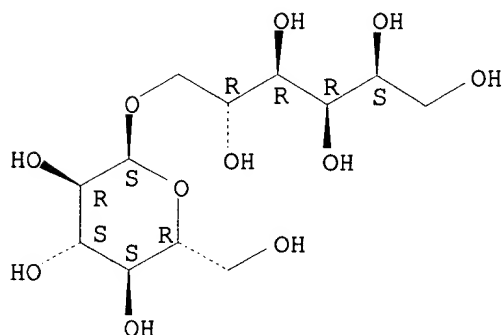
Absolute stereochemistry.



CM 2

CRN 534-73-6  
CMF C12 H24 O11  
CDES \*

Absolute stereochemistry.



L96 ANSWER 19 OF 26 USPATFULL on STN

ACCESSION NUMBER: 2002:279698 USPATFULL

TITLE: Composition and method for controlled release injections

INVENTOR(S): Roser, Bruce Joseph, Cambridge, UNITED KINGDOM

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002155129	A1	20021024
	US 6623762	B2	20030923
APPLICATION INFO.:	US 2001-784153	A1	20010216 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	JACOBSON HOLMAN PLLC, 400 SEVENTH STREET N.W., SUITE 600, WASHINGTON, DC, 20004		
NUMBER OF CLAIMS:	20		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	2 Drawing Page(s)		
LINE COUNT:	456		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is a pharmaceutical composition and method For controlling the release of a drug or vaccine to a patient where a slow, controlled release of drug or antigen occurs over a considerable period of time after injection. The drug or vaccine is contained in sugar glass microspheres and then placed in an anhydrous liquid, preferably perfluorocarbon, so that the vaccine is protected against dissolution while remaining surrounded by anhydrous liquid. This simple non-toxic system, deliverable by current syringe or present or future needle-free systems, is inexpensive and reliable and aids in parenteral drug delivery or mass immunization campaigns by reducing the need for repeated injections.

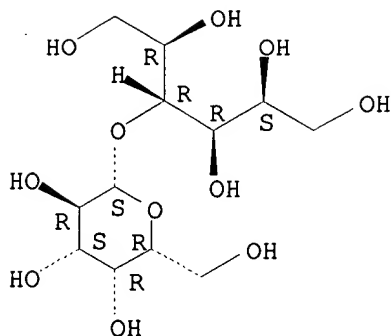
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 585-86-4, Lactitol 585-88-6, Maltitol  
(controlled release injections contg. perfluorocarbons)

RN 585-86-4 USPATFULL

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

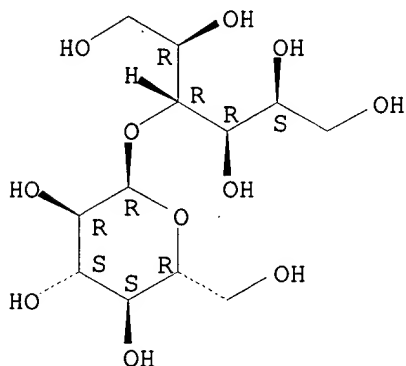
Absolute stereochemistry.



RN 585-88-6 USPATFULL

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L96 ANSWER 20 OF 26 USPATFULL on STN

ACCESSION NUMBER: 2002:16588 USPATFULL

TITLE: Modified glycosides, compositions comprised thereof and methods of use thereof

INVENTOR(S): Colaco, Camilo, Cambridgeshire, UNITED KINGDOM

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002009464	A1	20020124
APPLICATION INFO.:	US 2001-923023	A1	20010806 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1998-111925, filed on 8 Jul 1998, PENDING A 371 of International Ser. No. WO 1998-GB1962, filed on 3 Jul 1998, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-51727P	19970703 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SALIWANCHIK LLOYD & SALIWANCHIK, A PROFESSIONAL ASSOCIATION, 2421 N.W. 41ST STREET, SUITE A-1, GAINESVILLE, FL, 326066669	

NUMBER OF CLAIMS: 29

EXEMPLARY CLAIM: 1

LINE COUNT: 1080

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Modified glycosides are provided which can be used to form a variety of

materials including solid delivery systems, and optically clear colored devices or coatings. The solid delivery systems can be used for delivery and release of a variety of substances can be in the form of tablets for oral administration, or in the form of powders, microspheres or implants for intravenous, intradermal, transdermal, pulmonary or other route of administration. The modified glycosides may be processed to form a vitreous glass matrix having a substance, such as a therapeutic agent, or an optically active dye incorporated therein. In one embodiment, the vitreous glass matrix is provided in a solid dose form which is capable of releasing a therapeutic substance in situ at various controlled rates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

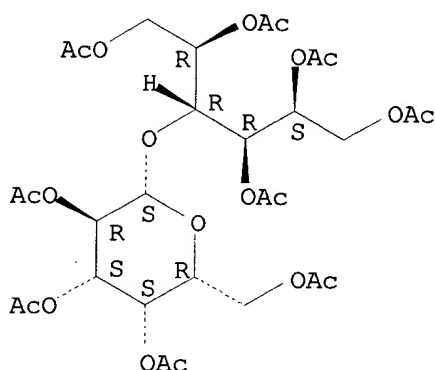
IT 37091-07-9P, Lactitol nonaacetate 41897-24-9P, Maltitol nonaacetate 41897-25-0P 219827-68-6P 219827-69-7P

(modified glycosides and compns. comprised thereof for medical and other uses)

RN 37091-07-9 USPATFULL

CN D-Glucitol, 4-O-(2,3,4,6-tetra-O-acetyl-.beta.-D-galactopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

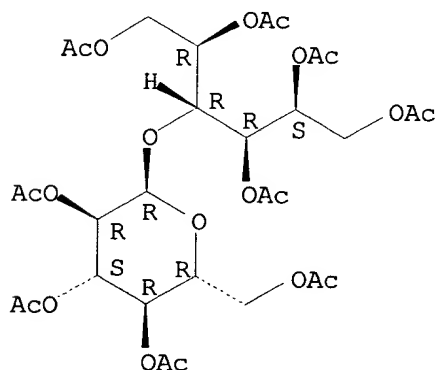
Absolute stereochemistry.



RN 41897-24-9 USPATFULL

CN D-Glucitol, 4-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

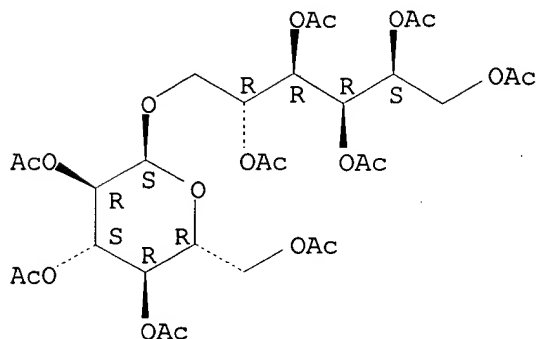


RN 41897-25-0 USPATFULL

CN D-Glucitol, 6-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)



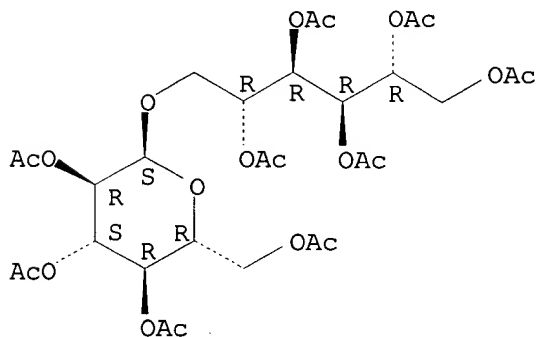
Absolute stereochemistry.



RN 219827-68-6 USPATFULL

CN D-Mannitol, 1-O-(2,3,4,6-tetra-O-acetyl- $\alpha$ -D-glucopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 219827-69-7 USPATFULL

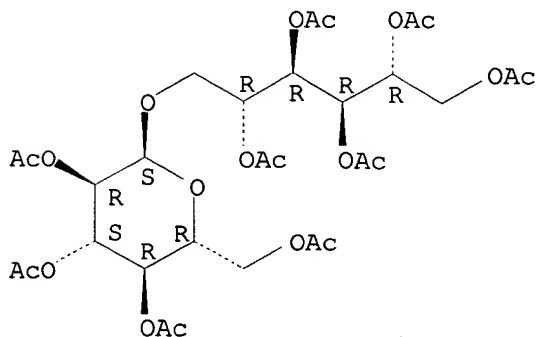
CN D-Glucitol, 6-O-(2,3,4,6-tetra-O-acetyl- $\alpha$ -D-glucopyranosyl)-, pentaacetate, mixt. with 1-O-(2,3,4,6-tetra-O-acetyl- $\alpha$ -D-glucopyranosyl)[D-mannitol] pentaacetate (9CI) (CA INDEX NAME)

CM 1

CRN 219827-68-6

CMF C30 H42 O20

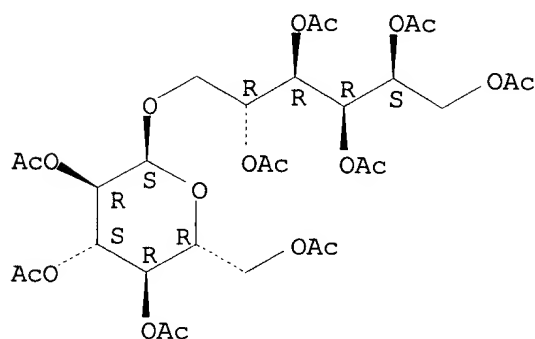
Absolute stereochemistry.



CM 2

CRN 41897-25-0  
CMF C30 H42 O20

Absolute stereochemistry.



L96 ANSWER 21 OF 26 USPATFULL on STN

ACCESSION NUMBER: 2002:261057 USPATFULL

TITLE: Storage of materials

INVENTOR(S): Franks, Felix, Cambridge, UNITED KINGDOM

Hatley, Ross H. M., Hardwick, UNITED KINGDOM

PATENT ASSIGNEE(S): Inhale Therapeutics Systems, Inc., San Carlos, CA,  
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 37872	E1	20021008
	US 5098893		19920324 (Original)
APPLICATION INFO.:	US 1999-270791		19990317 (9)
	US 1990-479939		19900212 (Original)

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1989-3593	19890216
DOCUMENT TYPE:	Reissue	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Russel, Jeffrey E.	
LEGAL REPRESENTATIVE:	Cagen, Felissa H., Neifeld, Richard A., Evans, Susan T.	
NUMBER OF CLAIMS:	94	
EXEMPLARY CLAIM:	18	
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)	
LINE COUNT:	2518	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A material or mixture of materials which is not itself storage stable is rendered storage stable by incorporation into a water-soluble or swellable glassy or rubbery composition which can then be stored at ambient temperature. Recovery is by adding aqueous solution to the composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

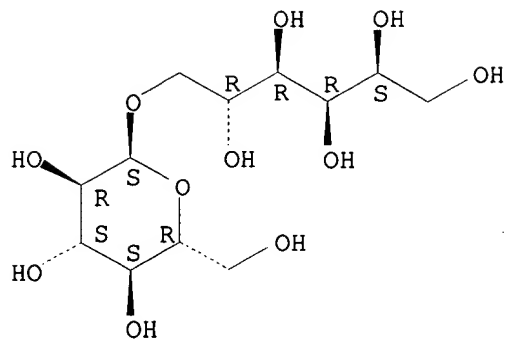
IT 534-73-6 64519-82-0, Palatinit

(as carrier substance for stable storage of lactate dehydrogenase)

RN 534-73-6 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 64519-82-0 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

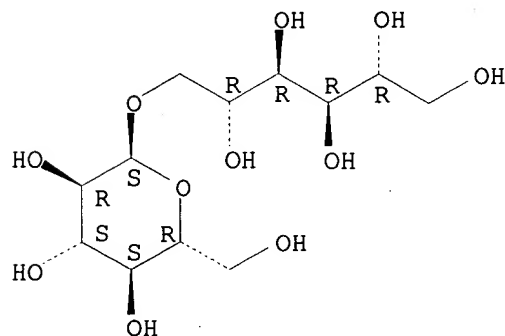
CM 1

CRN 20942-99-8

CMF C12 H24 O11

CDES 5:A-D-GLUCO,D-MANNO

Absolute stereochemistry.



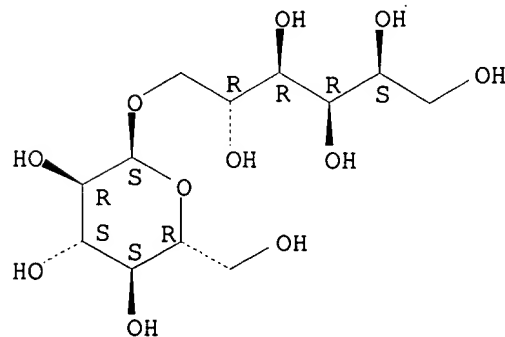
CM 2

CRN 534-73-6

CMF C12 H24 O11

CDES \*

Absolute stereochemistry.



L96 ANSWER 22 OF 26 USPATFULL on STN

ACCESSION NUMBER: 2001:199779 USPATFULL

TITLE: Solid delivery systems for aroma ingredients

INVENTOR(S): Mutka, Jerry Richard, Corona, CA, United States

McIver, Robert Clark, Tabernacle, NJ, United States

Palmer, Christine Ann, Whittier, CA, United States

Benczedi, Daniel, Carouge, Switzerland

Bouquerand, Pierre-Etienne, Pers-Jussy, France

Firmenich, Antoine, Geneva, Switzerland

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001038879	A1	20011108
	US 6607778	B2	20030819
APPLICATION INFO.:	US 2001-847906	A1	20010503 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. WO 1999-IB1777, filed on 3 Nov 1999, UNKNOWN Continuation-in-part of Ser. No. US 1998-185536, filed on 4 Nov 1998, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	IN 1998-330998	19981109
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	ALIREZA KARIMI ZIARANI, 36 RODDA BOULEVARD, SCARBOROUGH, ON, M1E 2Z6	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1061	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel solid systems for the delivery of aroma chemicals and flavoring ingredients, including an extrusion formed matrix containing an effective amount of certain specific hydrophilic aroma materials. These systems are useful for flavoring consumer products. An extrusion of solid Furaneol.RTM. compound and derivatives that have a content of up to 40% by weight of Furaneol.RTM. compound are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 585-86-4, Lactitol 585-88-6, Maltitol

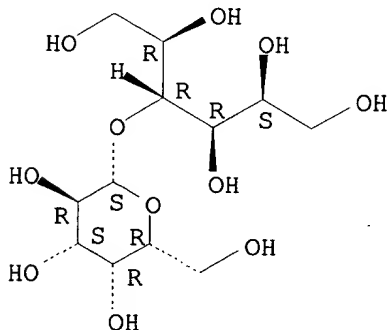
64519-82-0, Isomalt

(solid delivery systems for aroma ingredients)

RN 585-86-4 USPATFULL

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

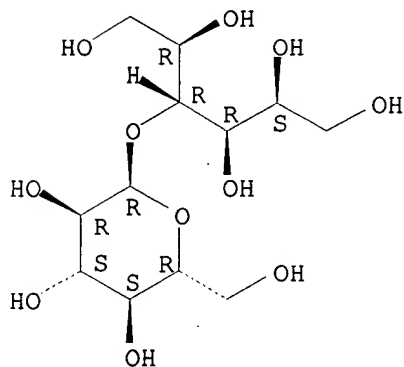
Absolute stereochemistry.



RN 585-88-6 USPATFULL

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 64519-82-0 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

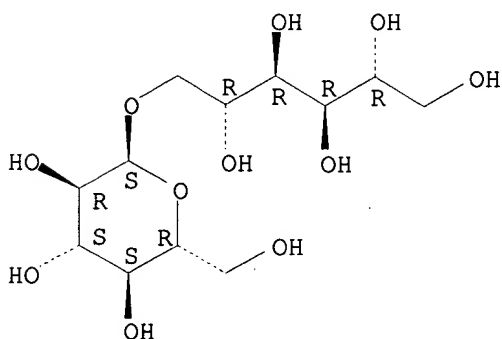
CM 1

CRN 20942-99-8

CMF C12 H24 O11

CDES 5:A-D-GLUCO, D-MANNO

Absolute stereochemistry.



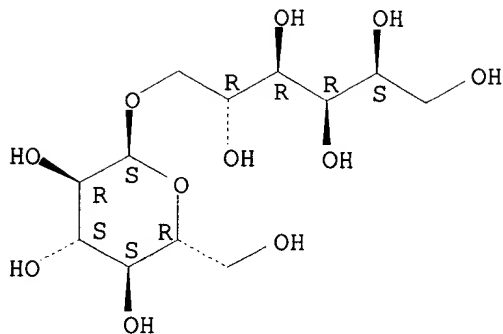
CM 2

CRN 534-73-6

CMF C12 H24 O11

CDES \*

Absolute stereochemistry.



L96 ANSWER 23 OF 26 USPATFULL on STN  
 ACCESSION NUMBER: 2001:78717 USPATFULL  
 TITLE: Food products containing seamless capsules and methods of making the same  
 INVENTOR(S): Kiefer, Jesse John, Belvidere, NJ, United States  
 Glenn, Blake Henderson, Madison, NJ, United States  
 PATENT ASSIGNEE(S): Warner-Lambert Company, Morris Plains, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6238690	B1	20010529
APPLICATION INFO.:	US 1997-828448		19970328 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1996-686649, filed on 24 Jul 1996 Division of Ser. No. US 1995-412672, filed on 29 Mar 1995, now patented, Pat. No. US 5595757, issued on 21 Jan 1997		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Page, Thurman K.		
ASSISTANT EXAMINER:	Bennett, Rachel M.		
LEGAL REPRESENTATIVE:	Vag, Linda A.		
NUMBER OF CLAIMS:	23		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)		
LINE COUNT:	695		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Consumable products including seamless capsules having an outer shell made of a carbohydrate material in a glassy state and an inner core.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

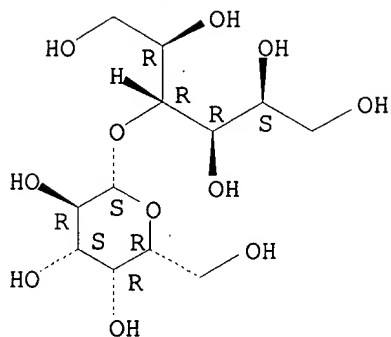
IT 585-86-4, Lactitol 585-88-6, Maltitol 64519-82-0, Isomalt

(methods of making food products contg. seamless capsules)

RN 585-86-4 USPATFULL

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

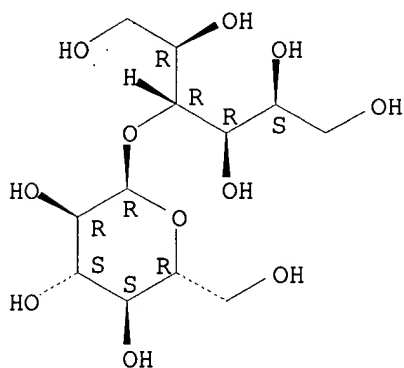
Absolute stereochemistry.



RN 585-88-6 USPATFULL

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 64519-82-0 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

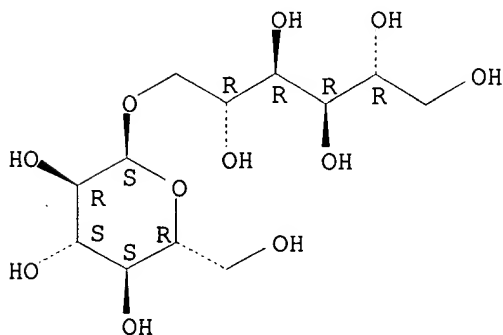
CM 1

CRN 20942-99-8

CMF C12 H24 O11

CDES 5:A-D-GLUCO,D-MANNO

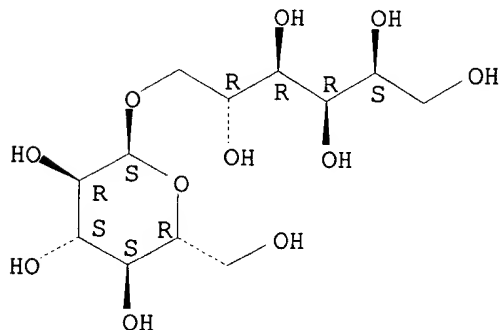
Absolute stereochemistry.



CM 2

CRN 534-73-6  
CMF C12 H24 O11  
CDES \*

Absolute stereochemistry.



L96 ANSWER 24 OF 26 USPATFULL on STN  
ACCESSION NUMBER: 1998:9031 USPATFULL  
TITLE: Printing inks  
INVENTOR(S): Croker, John, Broxbourne, England  
Kelly, Paula Michelle, London, England  
Burr, Raymond David, Surrey, England  
PATENT ASSIGNEE(S): Domino Printing Sciences Plc, England (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5711791		19980127
APPLICATION INFO.:	US 1996-628124		19960404 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1995-7881	19950418
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Klemanski, Helene	
LEGAL REPRESENTATIVE:	Laff, Whitesel, Conte & Saret, Ltd.	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
LINE COUNT:	831	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Ink jet inks are disclosed comprising a liquid vehicle which is preferably a blend of ethanol and water in a weight ratio of 23/70 (equivalent to 30/70 by volume) to 71/10 (equivalent to 90/10 by volume), a binder, which comprises a sugar or a sugar alcohol or a mixture thereof, preferably a mixture of sorbitol and maltitol, which is soluble in the liquid vehicle, a colorant which is soluble in the liquid vehicle and a surfactant comprising 90% or more of phosphatidylcholine or lysophosphatidylcholine, which is soluble in the liquid vehicle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 585-88-6, Maltitol

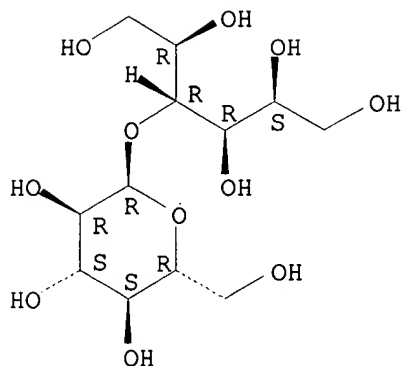
(binder; aq. inks contg. sugar (alc.) binders and (lyso)phosphatidylcholine surfactants for food and other substrates)

RN 585-88-6 USPATFULL

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)



Absolute stereochemistry.



L96 ANSWER 25 OF 26 USPATFULL on STN

ACCESSION NUMBER: 95:27215 USPATFULL

TITLE: Method of preparing Limulus amoebocyte lysate

INVENTOR(S): Tanaka, Shigenori, Tokyo, Japan

Aketagawa, Jun, Tokyo, Japan

Shibata, Yuko, Tokyo, Japan

PATENT ASSIGNEE(S): Seikagaku Kogyo Kabushiki Kaisha (Seikagaku Corporation), Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5401647		19950328
	WO 9206381		19920416
APPLICATION INFO.:	US 1992-859411		19920527 (7)
	WO 1991-JP1308		19910927
			19920527 PCT 371 date
			19920527 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1990-255201	19900927
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Warden, Robert J.	
ASSISTANT EXAMINER:	Crawford, L. M.	
LEGAL REPRESENTATIVE:	Sughrue, Mion, Zinn, Macpeak & Seas	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Figure(s); 3 Drawing Page(s)	
LINE COUNT:	1144	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method of preparing limulus amoebocyte lysate substantially free from factor G which comprises bringing limulus amoebocyte lysate into contact with an insoluble carrier on which a (1.fwdarw.3)-.beta.-D-glucoside structural portion represented by the following formula [I] produced by depolymerizing and/or fractionating a carbohydrate chain is immobilized: ##STR1## wherein n represents an integer of 2 to 370.

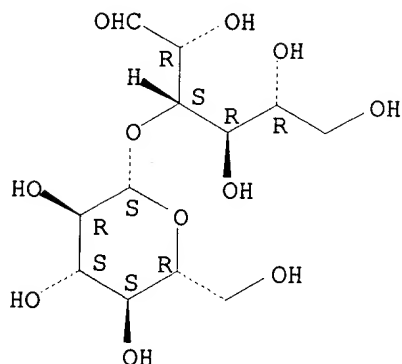
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 34980-39-7D, Laminaribiose, conjugates with Toyopearl (as stationary phase, for G factor removal from Limulus amoebocyte lysate for endotoxin-specific assay)

RN 34980-39-7 USPATFULL

CN D-Glucose, 3-O-.beta.-D-glucopyranosyl- (6CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



L96 ANSWER 26 OF 26 USPATFULL on STN  
 ACCESSION NUMBER: 92:23177 USPATFULL  
 TITLE: Storage of materials  
 INVENTOR(S): Franks, Felix, Cambridge, England  
 Hatley, Ross H. M., Hardwick, England  
 PATENT ASSIGNEE(S): Pafra Limited, Basildon, England (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5098893		19920324
APPLICATION INFO.:	US 1990-479939		19900212 (7)

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1989-3593	19890216
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Griffin, Ronald W.	
LEGAL REPRESENTATIVE:	Abelman, Frayne & Schwab	
NUMBER OF CLAIMS:	16	
EXEMPLARY CLAIM:	1	
LINE COUNT:	747	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A material or mixture of materials which is not itself storage stable is rendered storage stable by incorporation into a water-soluble or swellable glassy or rubbery composition which can then be stored at ambient temperature. Recovery is by adding aqueous solution to the composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

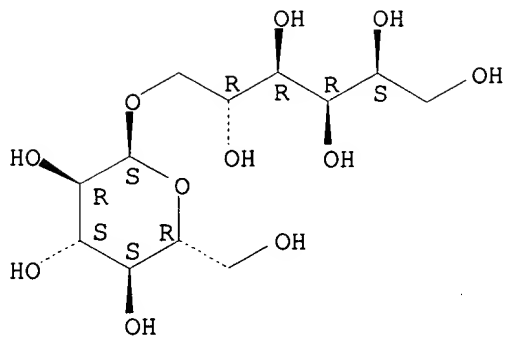
IT 534-73-6 64519-82-0, Palatinit

(as carrier substance for stable storage of lactate dehydrogenase)

RN 534-73-6 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 64519-82-0 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

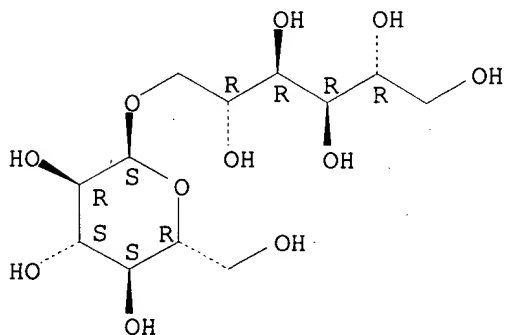
CM 1

CRN 20942-99-8

CMF C12 H24 O11

CDES 5:A-D-GLUCO, D-MANNO

Absolute stereochemistry.



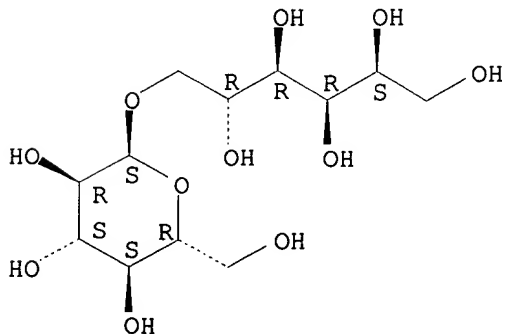
CM 2

CRN 534-73-6

CMF C12 H24 O11

CDES \*

Absolute stereochemistry.



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